

```

EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFFFFFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFFFFFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFFFFFF
EEE RRR RRR FFF
EEE RRR RRR FFF
EEE RRR RRR FFF
EEE RRR RRR FFF
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EEE RRR RRR FFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFFFFFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFFFFFF
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EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFF
EEEEEEEEEEEEEEEEEE RRRRRRRRRRRR FFFF

```

[illegible]

```

RRRRRRRRR      EEEEEEEEEEE      CCCCCCCCC      SSSSSSSSS      EEEEEEEEEEE      LL      EEEEEEEEEEE      CCCCCCCCC      TTTTTTTTTTT
RRRRRRRRR      EEEEEEEEEEE      CCCCCCCCC      SSSSSSSSS      EEEEEEEEEEE      LL      EEEEEEEEEEE      CCCCCCCCC      TTTTTTTTTTT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RRRRRRRRR      EEEEEEEEEEE      CCCCCCCCC      SSSSSSS      EEEEEEEEEEE      LL          EEEEEEEEEEE      CCCCCCCCC      TT
RRRRRRRRR      EEEEEEEEEEE      CCCCCCCCC      SSSSSSS      EEEEEEEEEEE      LL          EEEEEEEEEEE      CCCCCCCCC      TT
RR  RR          EE          CC          SS          EE          LL          EE          CC          TT
RR  RR          EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EE          CC          SS          EE          LL          EE          CC          TT
RR          RR  EEEEEEEEEEE      CCCCCCCCC      SSSSSSSSS      EEEEEEEEEEE      LLLLLLLLLLL      EEEEEEEEEEE      CCCCCCCCC      TT
RR          RR  EEEEEEEEEEE      CCCCCCCCC      SSSSSSSSS      EEEEEEEEEEE      LLLLLLLLLLL      EEEEEEEEEEE      CCCCCCCCC      TT

LL          IIIIIII      SSSSSSSSS
LL          IIIIIII      SSSSSSSSS
LL          II          SS
LL          II          SS
LL          II          SS
LL          II          SS
LL          II          SSSSSSS
LL          II          SSSSSSS
LL          II          SS
LL          II          SS
LL          II          SS
LL          II          SS
LLLLLLLLLLLL      IIIIIII      SSSSSSSSS
LLLLLLLLLLLL      IIIIIII      SSSSSSSSS

```



```
0001 0 MODULE RECSELECT
0002 0 (%TITLE 'Entry Validation'
0003 0 IDENT = 'V04-000') =
0004 0
0005 1 BEGIN
0006 1
0007 1
0008 1 *****
0009 1 *
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0027 1 *
0028 1 *****
0029 1
0030 1
0031 1 ++
0032 1 FACILITY: ERF, Error Log Report Generator
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 This routine will determine if the previously read entry
0037 1 meets user specified selection criteria.
0038 1
0039 1 ENVIRONMENT:
0040 1
0041 1 VAX/VMS operating system, user mode.
0042 1
0043 1 AUTHOR: Sharon Reynolds, CREATION DATE: January 1983
0044 1
0045 1 Modified by:
0046 1
0047 1 V03-022 EAD0179 Elliott A. Drayton 6-Jul-1984
0048 1 Obtain LSTLUN value from SYECOM.
0049 1
0050 1 V03-023 SAR0274 Sharon A. Reynolds 19-Jun-1984
0051 1 - Added another check for device selection and entry
0052 1 selection combinations to fix a bug with
0053 1 /INC=(MF,VOLUME) and /INC=(TAPE,VOLUME).
0054 1
0055 1 V03-022 EAD0179 Elliott A. Drayton 23-May-1984
0056 1 Correct the passing of the address of device name
0057 1 in VERIFY_DEVICE.
```

58	0058	1	
59	0059	1	
60	0060	1	V03-021 SAR0267 Sharon A. Reynolds 15-May-1984
61	0061	1	- Updated VERIFY_DEVICE to support longer device names.
62	0062	1	- Added check for unknown entry output to replace code
63	0063	1	that was previously removed.
64	0064	1	
65	0065	1	V03-020 SAR0254 Sharon A. Reynolds 23-Apr-1984
66	0066	1	Added flag to /before check to stop execution when
67	0067	1	last entry found.
68	0068	1	
69	0069	1	V03-019 EAD0151 Elliott A. Drayton 14-Apr-1984
70	0070	1	Fixed structure names in VERIFY_DEVICE.
71	0071	1	
72	0072	1	V03-018 EAD0141 Elliott A. Drayton 12-Apr-1984
73	0073	1	Removed reference to EMBETDEF.
74	0074	1	
75	0075	1	V03-017 SAR0248 Sharon A. Reynolds 10-Apr-1984
76	0076	1	Moved the unknown keyword tests to the verify entry
77	0077	1	routine so it would go through same tests as any
78	0078	1	other /include or /exclude entry selection.
79	0079	1	
80	0080	1	V03-016 SAR0245 Sharon A. Reynolds 4-Apr-1984
81	0081	1	Added EMB\$LOGMSP to device type entry table.
82	0082	1	
83	0083	1	V03-015 EAD0119 Elliott A. Drayton 23-Mar-1984
84	0084	1	Remove support for /UNKNOWN qualifier and added support
85	0085	1	for the UNKNOWN keyword.
86	0086	1	
87	0087	1	V03-014 EAD0115 Elliott A. Drayton 9-Mar-1984
88	0088	1	Removed emb_buf and syecom_buf.
89	0089	1	
90	0090	1	V03-013 SAR0189 Sharon A. Reynolds, 13-Feb-1984
91	0091	1	- Added 'CS' device name support to device table search
92	0092	1	routine.
93	0093	1	- Added additional test for entry summary update.
94	0094	1	
95	0095	1	V03-012 SAR0184 Sharon A. Reynolds, 17-Jan-1984
96	0096	1	- Fixed a bug in the output of the erf_unkentry message.
97	0097	1	- Added code to set the end value indicator when
98	0098	1	the last selected entry (/entry) is found.
99	0099	1	
100	0100	1	V03-011 SAR0181 Sharon A. Reynolds, 13-Dec-1983
101	0101	1	- Remove descriptor references.
102	0102	1	- Add device attention keyword support.
103	0103	1	- Add lm/sp entries to device errors entry list.
104	0104	1	- Add lm/sp entry check for bus class selections.
105	0105	1	- Removed logmessage keyword.
106	0106	1	- Add unsolicited_mscp keyword support.
107	0107	1	- Added incomplete entry message.
108	0108	1	
109	0109	1	V03-010 SAR0176 Sharon A. Reynolds, 21-Nov-1983
110	0110	1	- Removed un-necessary check for outputting all
111	0111	1	entries.
112	0112	1	- Changed reference to report type.
113	0113	1	
114	0114	1	V03-009 SAR0152 Sharon A. Reynolds, 7-Oct-1983
			- Added code to output informational messages when


```
115 0115 1 and unknown entry is encountered.
116 0116 1 - Added the code that counts intervening logmessage
117 0117 1 logstatus entries.
118 0118 1 - Re-structured the /include and /exclude entry
119 0119 1 checks to fix a bug.
120 0120 1 - Made /includ=disks/exclude=db1 a valid command.
121 0121 1
122 0122 1 V03-008 SAR0139 Sharon A. Reynolds, 20-Sep-1983
123 0123 1 Fixed a bug in mount/dismount output. Fixed an out
124 0124 1 of range loop.
125 0125 1
126 0126 1 V03-007 SAR0122 Sharon A. Reynolds, 23-Aug-1983
127 0127 1 Re-wrote translate_class routine for use with the
128 0128 1 permanent device tables.
129 0129 1
130 0130 1 V03-006 SAR0032 Sharon A. Reynolds, 2-Jun-1983
131 0131 1 Replaced emb_stuf with emb_buf definitions. Fixed bug
132 0132 1 in dc$_bus selection.
133 0133 1
134 0134 1 V03-005 SAR0029 Sharon A. Reynolds, 11-May-1983
135 0135 1 Removed support for logstatus keyword.
136 0136 1
137 0137 1 V03-004 SAR0013 Sharon A. Reynolds, 18-Apr-1983
138 0138 1 Deleted the log message and status message entries
139 0139 1 from the 'control' table. Added call to update
140 0140 1 entry summaries.
141 0141 1
142 0142 1 V03-003 SAR0003 Sharon A. Reynolds, 5-Apr-1983
143 0143 1 Removed the volume_output flag definition. Changed
144 0144 1 any references to volume_output flag so they refer
145 0145 1 to it from SYECOM.
146 0146 1
147 0147 1 V03-002 SAR0002 Sharon A. Reynolds, 5-Apr-1983
148 0148 1 Fixed /exclude selection bug.
149 0149 1
150 0150 1 V03-001 SAR0001 Sharon A. Reynolds, 29-Mar-1983
151 0151 1 Fixed /include='device name', volume mount/dismount
152 0152 1 selection problem.
153 0153 1
154 0154 1 --
155 0155 1
156 0156 1
157 0157 1
158 0158 1 Required files
159 0159 1
160 0160 1 REQUIRE 'SRC$:ERFDEF.REQ' ; ! ERF defintions
161 0446 1 REQUIRE 'LIB$:PARSERDAT.R32' ; ! ERF parser data definitions
162 0600 1 REQUIRE 'SRC$:RECSELDEF.REQ' ; ! EMB, SYECOM, LOGMSG, LOGSTS, and
163 0731 1 ! VOLMOUNT field defintions
164 0732 1
165 0733 1
166 0734 1 Table of contents
167 0735 1
168 0736 1
169 0737 1 FORWARD ROUTINE
170 0738 1 Record_selected, ! Verify entry against selections
171 0739 1 Verify_entry, ! Verify the entry type
```

```
: 172      0740 1      Device_type_entry,      ! Determine if it's a device type entry
: 173      0741 1      Verify_device_class,    ! Verify the device class
: 174      0742 1      Verify_device,          ! Verify the device name
: 175      0743 1      Translate_class ;        ! Translate device class to a name
: 176      0744 1
: 177      0745 1
: 178      0746 1      ! Declare external routines
: 179      0747 1
: 180      0748 1      EXTERNAL ROUTINE
: 181      0749 1      Exec_image,              ! Execute an image
: 182      0750 1      Intervene_increment,
: 183      0751 1      Intervene_output,
: 184      0752 1      Search_queue: addressing_mode (general) , ! Search queue of devices selected
: 185      0753 1      Validate_packet;          ! Is the packet validate for the cpu it was logged on.
: 186      0754 1
: 187      0755 1
: 188      0756 1      ! Declare external literals
: 189      0757 1
: 190      0758 1      EXTERNAL LITERAL
: 191      0759 1      Erf_incentry,
: 192      0760 1      Erf_unkclass,
: 193      0761 1      Erf_unkcpu,
: 194      0762 1      Erf_unkentry,
: 195      0763 1      Erf_unktype ;
: 196      0764 1
: 197      0765 1
: 198      0766 1      ! Declare external data.
: 199      0767 1
: 200      0768 1      EXTERNAL
: 201      0769 1      Class_dir:                REF $BBLOCK,
: 202      0770 1      Device_class,
: 203      0771 1      Device_type,
: 204      0772 1      Emb:                      $BBLOCK PSECT (EMB),
: 205      0773 1      Exclude_flag,
: 206      0774 1      Exclude_mask:            REF $BBLOCK,
: 207      0775 1      Include_mask:            REF $BBLOCK,
: 208      0776 1      Option_flag:             REF $BBLOCK,
: 209      0777 1      Parser_data:             REF $BBLOCK,
: 210      0778 1      Processor_type,
: 211      0779 1      Summary_dispatcher_addr,
: 212      0780 1      Summary_flag:            REF $BBLOCK,
: 213      0781 1      Syecom:                  $BBLOCK PSECT (SYECOM),
: 214      0782 1      Unknown_entry ;
: 215      0783 1
: 216      0784 1
: 217      0785 1      ! Declare literal definitions
: 218      0786 1
: 219      0787 1      LITERAL
: 220      0788 1      Incomplete_entry = 128 ;
: 221      0789 1
: 222      0790 1
: 223      0791 1      ! Own storage definitions
: 224      0792 1
: 225      0793 1      OWN
: 226      0794 1      Lstlun:                  Long,
: 227      0795 1      Dev_selection_required: BYTE,
: 228      0796 1      Device_status:          BYTE,
```



```
: 229      0797 1      Dev_cls_status: BYTE,  
: 230      0798 1      Dev_type_entry_sts: BYTE,  
: 231      0799 1      Entry_status: BYTE,  
: 232      0800 1      Validate_pkt_sts: Initial (false),  
: 233      0801 1      Bugchks: VECTOR [3,byte,unsigned] ! Bugcheck type entries  
: 234      0802 1      Initial (byte  
: 235      0803 1      (EMBSK_CR,      ! Crash  
: 236      0804 1      EMBSK_SBC,      ! System bugchecks  
: 237      0805 1      EMBSK_UBC)), ! User bugchecks  
: 238      0806 1  
: 239      0807 1      Control: VECTOR [7,byte,unsigned] ! Control type entries  
: 240      0808 1      Initial (byte  
: 241      0809 1      (EMBSK_CS,      ! Cold re-start  
: 242      0810 1      EMBSK_NF,      ! New file created  
: 243      0811 1      EMBSK_WS,      ! Warm re-start  
: 244      0812 1      EMBSK_TS,      ! Time stamp  
: 245      0813 1      EMBSK_SS,      ! System service message  
: 246      0814 1      EMBSK_OM,      ! Operator message  
: 247      0815 1      EMBSK_NM)), ! Network message  
: 248      0816 1  
: 249      0817 1      Cpu: VECTOR [8,byte,unsigned] ! Cpu type entries  
: 250      0818 1      Initial (byte  
: 251      0819 1      (EMBSK_AW,      ! Asynchronous write error  
: 252      0820 1      EMBSK_OBA,      ! Unibus adapter error  
: 253      0821 1      EMBSK_MBA,      ! Massbus adapter error  
: 254      0822 1      EMBSK_UI,      ! Undefined interrupt  
: 255      0823 1      EMBSK_BE,      ! Bus error  
: 256      0824 1      EMBSK_SA,      ! SBI alert  
: 257      0825 1      EMBSK_SI,      ! 11/750 fault thru SBI vector  
: 258      0826 1      EMBSK_UE)), ! 11/730 unibus error  
: 259      0827 1  
: 260      0828 1      Dev_errors: VECTOR [3,byte,unsigned] ! Device error entries  
: 261      0829 1      Initial (byte  
: 262      0830 1      (EMBSK_DE,      ! Device Errors  
: 263      0831 1      EMBSK_SP,      ! Logstatus entries (mscp)  
: 264      0832 1      EMBSK_LM)), ! Logmessage entries (mscp)  
: 265      0833 1  
: 266      0834 1      Memorys: VECTOR [2,byte,unsigned] ! Memory entries  
: 267      0835 1      Initial (byte  
: 268      0836 1      (EMBSK_SE,      ! Soft ECC error  
: 269      0837 1      EMBSK_RE)), ! Hard ECC error  
: 270      0838 1  
: 271      0839 1      Volume: VECTOR [2,byte,unsigned] ! Volume change entries  
: 272      0840 1      Initial (byte  
: 273      0841 1      (EMBSK_VM,      ! Volume mounts  
: 274      0842 1      EMBSK_VD)), ! Volume dismounts  
: 275      0843 1
```

```

: 277 0844 1 GLOBAL ROUTINE RECORD_SELECTED =
: 278 0845 2 Begin
: 279 0846 2
: 280 0847 2 ++
: 281 0848 2
: 282 0849 2 Functional Description:
: 283 0850 2
: 284 0851 2 This routine will determine what selection qualifiers are
: 285 0852 2 specified and match the appropriate fields in the current
: 286 0853 2 entry against the selections. It return TRUE if the
: 287 0854 2 current entry matches or return FALSE if the current entry
: 288 0855 2 does NOT match.
: 289 0856 2
: 290 0857 2 Calling sequence:
: 291 0858 2
: 292 0859 2 RECORD_SELECTED ()
: 293 0860 2
: 294 0861 2 Input parameters:
: 295 0862 2
: 296 0863 2 None
: 297 0864 2
: 298 0865 2 Output parameters:
: 299 0866 2
: 300 0867 2 None
: 301 0868 2
: 302 0869 2 --
: 303 0870 2
: 304 0871 2 LOCAL
: 305 0872 2 Include_status: BYTE
: 306 0873 2 Initial (true),
: 307 0874 2 Exclude_status: BYTE
: 308 0875 2 Initial (true) ;
: 309 0876 2
: 310 0877 2 lstlun = .syecom [syel_lstlun];
: 311 0878 2
: 312 0879 2
: 313 0880 2 Validate the packet for entry/cpu type and device class/type.
: 314 0881 2
: 315 0882 2 If NOT (VALIDATE_PACKET ())
: 316 0883 2 Then
: 317 0884 2 Unknown_entry = true
: 318 0885 2 Else
: 319 0886 2 Unknown_entry = false ;
: 320 0887 2
: 321 0888 2
: 322 0889 2 Determine if /summary selected and update that entry summary
: 323 0890 2 information.
: 324 0891 2
: 325 0892 2 If (.option_flag[opt$summary_qual] AND
: 326 0893 2 (.summary_flag[sum$entry] OR
: 327 0894 2 .summary_flag[sum$all_summ] OR
: 328 0895 2 .summary_flag[sum$histogram]))
: 329 0896 2 Then
: 330 0897 2 Exec_image (summary_dispatcher_addr,lstlun,%REF(entry_summ_upd)) ;
: 331 0898 2
: 332 0899 2
: 333 0900 2 If incomplete entry report the error.
```



```
334 0901 2 |
335 0902 2 | if ((NOT .syecom[sye$b_valid_entry]) AND
336 0903 2 | (.emb[emb$w_hd_entry] GEQ incomplete_entry))
337 0904 2 | Then
338 0905 2 | Begin
339 0906 2 | Signal (erf_incentry, 1, .emb[emb$w_hd_entry]);
340 0907 2 | Return false;
341 0908 2 | End;
342 0909 2 |
343 0910 2 |
344 0911 2 | Determine whether the volume mounts/dismounts should be output or just
345 0912 2 | label information saved from the entry.
346 0913 2 |
347 0914 2 | if (.exclude_mask[exc$v_volume] AND
348 0915 4 | (.include_mask[inc$v_device_select] OR
349 0916 4 | .include_mask[inc$v_dev_class_select] OR
350 0917 4 | .include_mask[inc$v_dev_attentions] OR
351 0918 4 | .include_mask[inc$v_dev_errors] OR
352 0919 2 | .include_mask[inc$v_dev_timeouts])) AND
353 0920 2 | (NOT .include_mask[inc$v_volume] OR
354 0921 2 | NOT .option_flag[opt$v_output_all])
355 0922 2 | Then
356 0923 2 |
357 0924 2 | Indicate that volume mount/dismount entries
358 0925 2 | should not be output.
359 0926 2 |
360 0927 2 | Syecom[sye$b_volume_output] = false
361 0928 2 | Else
362 0929 2 | Syecom[sye$b_volume_output] = true ;
363 0930 2 |
364 0931 2 |
365 0932 2 | Determine if the /ENTRY qualifier was specified.
366 0933 2 |
367 0934 2 | if .option_flag[opt$v_entry_qual]
368 0935 2 | Then
369 0936 2 |
370 0937 2 | /Entry specified, get the address of the entry selection
371 0938 2 | data and determine if the number of this entry
372 0939 2 | is within the selected range.
373 0940 2 |
374 0941 2 | Begin
375 0942 2 | If .syecom[sye$l_reccnt] LSSU .parser_data[erl$l_end_entry]
376 0943 2 | Then
377 0944 2 |
378 0945 2 | This entry should be within the selected range, ensure
379 0946 2 | the entry number is greater than the starting entry selection.
380 0947 2 |
381 0948 2 | Begin
382 0949 2 | If NOT (.syecom[sye$l_reccnt] GEQU .parser_data[erl$l_start_entry])
383 0950 2 | Then
384 0951 2 |
385 0952 2 | Entry is NOT within the selected range, return to calling
386 0953 2 | routine.
387 0954 2 |
388 0955 2 | Return false ;
389 0956 2 | End
390 0957 2 | Else
```

```
391 0958 3      |
392 0959 3      | Entry is NOT within the selected range, return to calling
393 0960 3      | routine.
394 0961 3      |
395 0962 4      | Begin
396 0963 4      | If .syecom[sye$l_reccnt] GEQU .parser_data[erl$l_end_entry]
397 0964 4      | Then
398 0965 4      |
399 0966 4      |     Indicate that last selected entry was found.
400 0967 4      |
401 0968 4      |     Syecom[sye$b_end_value] = true ;
402 0969 4      |
403 0970 4      | Return true ;
404 0971 3      | End ;
405 0972 2      | End ;
406 0973 2      |
407 0974 2      |
408 0975 2      | Determine if the /BEFORE qualifier was specified.
409 0976 2      |
410 0977 2      | If .option_flag[opt$v_before_qual]
411 0978 2      | Then
412 0979 2      |
413 0980 2      |     Determine if the date/time that this entry was recorded falls
414 0981 2      |     within the range of selected date/times.
415 0982 2      |
416 0983 3      | Begin
417 P 0984 3      | If COMPARE_QUAD(emb[emb$q_hd_time],GEQU,
418 0985 4      |     parser_data[erl($q_end_date)])
419 0986 3      | Then
420 0987 3      |
421 0988 3      |     This entry is NOT within the selected date/time range,
422 0989 3      |     return to the calling routine.
423 0990 3      |
424 0991 4      | Begin
425 0992 4      | Syecom[sye$b_end_value] = true ;
426 0993 4      | Return true ;
427 0994 3      | End ;
428 0995 2      | End ;
429 0996 2      |
430 0997 2      |
431 0998 2      | Determine if the /SINCE qualifier was specified.
432 0999 2      |
433 1000 2      | If .option_flag[opt$v_since_qual]
434 1001 2      | Then
435 1002 2      |
436 1003 2      |     Ensure that the entry date/time is greater than the starting
437 1004 2      |     time/date selection.
438 1005 2      |
439 1006 3      | Begin
440 P 1007 3      | If NOT COMPARE_QUAD(emb[emb$q_hd_time],GEQU,
441 1008 4      |     parser_data[erl($q_start_date)])
442 1009 3      | Then
443 1010 3      |
444 1011 3      |     The entry does NOT meet that selection criteria for date/time,
445 1012 3      |     return to the calling routine.
446 1013 3      |
447 1014 3      | Return false ;
```



```

: 448      1015 2      End ;
: 449      1016 2
: 450      1017 2
: 451      1018 2      Determine if the /SID_REGISTER qualifier was specified.
: 452      1019 2
: 453      1020 2      If .option_flag[opt$V_sid_reg_qual]
: 454      1021 2      Then
: 455      1022 2
: 456      1023 2      Determine if the entry sid matches the selected sid.
: 457      1024 2
: 458      1025 2      Begin
: 459      1026 2      If NOT .parser_data[erl$l_sid_selection] EQLU .emb[emb$l_hd_sid]
: 460      1027 2      Then
: 461      1028 2
: 462      1029 2      Entry sid does NOT match selected sid, return to calling
: 463      1030 2      routine.
: 464      1031 2
: 465      1032 2      Return false ;
: 466      1033 2      End ;
: 467      1034 2
: 468      1035 2      Device_status = false ;
: 469      1036 2      Dev_cls_status = false ;
: 470      1037 2      Entry_status = false ;
: 471      1038 2
: 472      1039 2      Dev_type_entry_sts = DEVICE_TYPE_ENTRY ( ) ;
: 473      1040 2
: 474      1041 2      If .option_flag[opt$V_include_qual]
: 475      1042 2      Then
: 476      1043 2      Begin
: 477      1044 2      Exclude_flag = false ;
: 478      1045 2
: 479      1046 2      If .dev_type_entry_sts OR
: 480      1047 3      (.emb[emb$w_hd_entry] EQLU EMB$K_VM) OR
: 481      1048 4      (.emb[emb$w_hd_entry] EQLU EMB$K_VD)
: 482      1049 3      Then
: 483      1050 4      Begin
: 484      1051 4      If .include_mask[inc$V_device_select]
: 485      1052 4      Then
: 486      1053 5      Begin
: 487      1054 5      If VERIFY_DEVICE ( )
: 488      1055 5      Then
: 489      1056 5      Device_status = true
: 490      1057 5      Else
: 491      1058 5      Device_status = false ;
: 492      1059 5      End ;
: 493      1060 4
: 494      1061 4      If .include_mask[inc$V_dev_class_select]
: 495      1062 4      Then
: 496      1063 5      Begin
: 497      1064 5      If VERIFY_DEVICE_CLASS ( )
: 498      1065 5      Then
: 499      1066 5      Dev_cls_status = true
: 500      1067 5      Else
: 501      1068 5      Dev_cls_status = false ;
: 502      1069 4      End ;
: 503      1070 3      End ;
: 504      1071 3
```

```

505 1072 3 If .include_mask[inc$V_entry_select]
506 1073 3 Then
507 1074 4   Begin
508 1075 4   If VERIFY_ENTRY ()
509 1076 4   Then
510 1077 4     Entry_status = true
511 1078 4   Else
512 1079 4     Entry_status = false ;
513 1080 4   End ;
514 1081 3
515 1082 3
516 1083 4 If (.include_mask[inc$V_device_select] AND
517 1084 3   .dev_type_entry_sts AND .device_status) OR
518 1085 3   (.include_mask[inc$V_dev_class_select] AND
519 1086 4   .dev_type_entry_sts AND .dev_class_status) OR
520 1087 3   (.include_mask[inc$V_entry_select] AND .entry_status)
521 1088 3 Then
522 1089 4   Include_status = true
523 1090 3 Else
524 1091 4   Include_status = false ;
525 1092 3
526 1093 3
527 1094 3
528 1095 3
529 1096 3 If .include_mask[inc$V_device_select] AND
530 1097 3   .include_mask[inc$V_entry_select]
531 1098 3 Then
532 1099 4   Begin
533 1100 4   Include_status = false ;
534 1101 4   If .dev_selection_required
535 1102 4   Then
536 1103 5     Begin
537 1104 5     If (.entry_status AND .device_status) OR
538 1105 5       (.dev_type_entry_sts AND .device_status)
539 1106 6     Then
540 1107 5       Include_status = true ;
541 1108 5     End
542 1109 5   Else
543 1110 4     Begin
544 1111 5     If .dev_type_entry_sts AND .device_status
545 1112 5     Then
546 1113 5       Begin
547 1114 6       Include_status = true ;
548 1115 6     End
549 1116 6   Else
550 1117 5     Begin
551 1118 6     If (NOT .dev_type_entry_sts AND .entry_status)
552 1119 7     Then
553 1120 6       Include_status = true ;
554 1121 6     End ;
555 1122 5   End ;
556 1123 4   End ;
557 1124 3 End ;
558 1125 3
559 1126 3 If .include_mask[inc$V_dev_class_select] AND
560 1127 3   .include_mask[inc$V_entry_select]
561 1128 3 Then
```



```

562      1129 4      Begin
563      1130 4      Include_status = false ;
564      1131 4
565      1132 4      If .dev_selection_required
566      1133 4      Then
567      1134 5          Begin
568      1135 5              If (.entry_status AND .dev_cls_status) OR
569      1136 6                  (.dev_type_entry_sts AND .dev_cls_status)
570      1137 5              Then
571      1138 5                  Include_status = true ;
572      1139 5              End
573      1140 4          Else
574      1141 5              Begin
575      1142 5                  If .dev_type_entry_sts AND .dev_cls_status
576      1143 5                  Then
577      1144 6                      Begin
578      1145 6                          Include_status = true ;
579      1146 6                      End
580      1147 5                  Else
581      1148 6                      Begin
582      1149 7                          If (NOT .dev_type_entry_sts AND .entry_status)
583      1150 6                          Then
584      1151 6                              Include_status = true ;
585      1152 5                          End ;
586      1153 4                      End ;
587      1154 3                  End ;
588      1155 3
589      1156 2      End ;
590      1157 2
591      1158 2      !
592      1159 2      ! If not /include option then include_status = false
593      1160 2      !
594      1161 2
595      1162 2      If .option_flag[opt$v_exclude_qual]
596      1163 2      Then
597      1164 3          Begin
598      1165 3              Exclude_flag = true ;
599      1166 3
600      1167 3          If .dev_type_entry_sts OR
601      1168 3              (.emb[emb$w_hd_entry] EQLU EMB$K_VM) OR
602      1169 4              (.emb[emb$w_hd_entry] EQLU EMB$K_VD)
603      1170 3          Then
604      1171 4              Begin
605      1172 4                  If .exclude_mask[exc$v_device_select]
606      1173 4                  Then
607      1174 5                      Begin
608      1175 5                          If VERIFY_DEVICE ( )
609      1176 5                          Then
610      1177 5                              Device_status = true
611      1178 5                          Else
612      1179 5                              Device_status = false ;
613      1180 4                          End ;
614      1181 4
615      1182 4          If .exclude_mask[exc$v_dev_class_select]
616      1183 4          Then
617      1184 5              Begin
618      1185 5                  If VERIFY_DEVICE_CLASS ( )
```

```

: 619      1186      5      Then
: 620      1187      5      Dev_cls_status = true
: 621      1188      5      Else
: 622      1189      5      Dev_cls_status = false ;
: 623      1190      4      End ;
: 624      1191      3      End ;
: 625      1192      3
: 626      1193      3      If .exclude_mask[exc$v_entry_select]
: 627      1194      3      Then
: 628      1195      4      Begin
: 629      1196      4      If VERIFY_ENTRY ()
: 630      1197      4      Then
: 631      1198      4      Entry_status = true
: 632      1199      4      Else
: 633      1200      4      Entry_status = false ;
: 634      1201      3      End ;
: 635      1202      3
: 636      1203      4      If (.exclude_mask[exc$v_device_select] AND
: 637      1204      3      .dev_type_entry_sts AND .device_status) OR
: 638      1205      3
: 639      1206      4      (.exclude_mask[exc$v_dev_class_select] AND
: 640      1207      3      .dev_type_entry_sts AND .dev_cls_status) OR
: 641      1208      3
: 642      1209      4      (.exclude_mask[exc$v_entry_select] AND .entry_status)
: 643      1210      3      Then
: 644      1211      3      Exclude_status = false
: 645      1212      3      Else
: 646      1213      3      Exclude_status = true ;
: 647      1214      3
: 648      1215      3
: 649      1216      3      If .exclude_mask[exc$v_device_select] AND
: 650      1217      3      .exclude_mask[exc$v_entry_select]
: 651      1218      3      Then
: 652      1219      4      Begin
: 653      1220      4      Exclude_status = true ;
: 654      1221      4
: 655      1222      4      If .dev_selection_required
: 656      1223      4      Then
: 657      1224      5      Begin
: 658      1225      5      If (.entry_status AND .device_status) OR
: 659      1226      6      (.dev_type_entry_sts AND .device_status)
: 660      1227      5      Then
: 661      1228      5      Exclude_status = false ;
: 662      1229      5      End
: 663      1230      4      Else
: 664      1231      5      Begin
: 665      1232      5      If .dev_type_entry_sts AND .device_status
: 666      1233      5      Then
: 667      1234      6      Begin
: 668      1235      6      Exclude_status = false ;
: 669      1236      6      End
: 670      1237      5      Else
: 671      1238      6      Begin
: 672      1239      7      If (NOT .dev_type_entry_sts AND .entry_status)
: 673      1240      6      Then
: 674      1241      6      Exclude_status = false ;
: 675      1242      5      End ;
```



```

676      1243 4      End ;
677      1244 3      End ;
678      1245 3
679      1246 3      If .exclude_mask[exc$y_dev_class_select] AND
680      1247 3      .exclude_mask[exc$y_entry_select]
681      1248 3      Then
682      1249 4      Begin
683      1250 4      Exclude_status = true ;
684      1251 4
685      1252 4      If .dev_selection_required
686      1253 4      Then
687      1254 5      Begin
688      1255 5      If (.entry_status AND .dev_cls_status) OR
689      1256 6      (.dev_type_entry_sts AND .dev_cls_status)
690      1257 5      Then
691      1258 5      Exclude_status = false ;
692      1259 5      End
693      1260 4      Else
694      1261 5      Begin
695      1262 5      If .dev_type_entry_sts AND .dev_cls_status
696      1263 5      Then
697      1264 6      Begin
698      1265 6      Exclude_status = false ;
699      1266 6      End
700      1267 5      Else
701      1268 6      Begin
702      1269 7      If (NOT .dev_type_entry_sts AND .entry_status)
703      1270 6      Then
704      1271 6      Exclude_status = false ;
705      1272 5      End ;
706      1273 4      End ;
707      1274 3      End ;
708      1275 3
709      1276 2      End ;      ! of /exclude processing
710      1277 2
711      1278 2      IF /exclude option match, exclude_status = false.
712      1279 2
713      1280 2
714      1281 2
715      1282 2
716      1283 2      Determine whether to count logmessage/logstatus entries.
717      1284 2
718      1285 3      If ( (.include_status) AND (.exclude_status) AND
719      1286 3      (.parser_data[erl$b_rpt_type] EQL full_rep) )
720      1287 2      Then
721      1288 2
722      1289 2      Determine if it was a logmessage/logstatus entry.
723      1290 2
724      1291 3      Begin
725      1292 3      If (.emb[emb$w_hd_entry] EQLU EMB$( SP) OR
726      1293 4      (.emb[emb$w_hd_entry] EQLU EMB$( _LM)
727      1294 3      Then
728      1295 3
729      1296 3      Count the number of logmessage/logstatus entries
730      1297 3      that might be skipped.
731      1298 3
732      1299 3      INTERVENE_INCREMENT (lstlun)
```

```

: 733      1300      Else
: 734      1301      |
: 735      1302      | Determine whether to output the logstatus/logmessage
: 736      1303      | intervening message and if necessary output it.
: 737      1304      |
: 738      1305      | INTERVENE_OUTPUT (lstlun) ;
: 739      1306      | End ;
: 740      1307      |
: 741      1308      |
: 742      1309      | Determine if the entry met the selection criteria.
: 743      1310      |
: 744      1311      | Determine if this is an unknown entry.
: 745      1312      |
: 746      1313      | If .unknown_entry
: 747      1314      | Then
: 748      1315      | | Indicate that this is an unknown entry and return with a
: 749      1316      | | true value so that it will be output.
: 750      1317      | |
: 751      1318      | | Return true ;
: 752      1319      | |
: 753      1320      | If (NOT .include_status) OR
: 754      1321      | (NOT .exclude_status)
: 755      1322      | Then
: 756      1323      | |
: 757      1324      | | Indicate that the entry should not be output by
: 758      1325      | | returning to the calling routine with a false value.
: 759      1326      | |
: 760      1327      | | Return false ;
: 761      1328      | |
: 762      1329      | |
: 763      1330      | | Indicate that the entry should be output by
: 764      1331      | | returning to the calling routine with a true value.
: 765      1332      | |
: 766      1333      | | Return true ;
: 767      1334      | |
: 768      1335      | End ; ! Routine
```

```

.TITLE RECSELECT Entry Validation
.IDENT \V04-000\
```

```

.PSECT $OWNS,NOEXE, PIC,2
```

```

00000 LSTLUN: .BLKB 4
00004 DEV_SELECTION_REQUIRED:
        .BLKB 1
00005 DEVICE_STATUS:
        .BLKB 1
00006 DEV_CLS_STATUS:
        .BLKB 1
00007 DEV_TYPE_ENTRY_STS:
        .BLKB 1
00008 ENTRY_STATUS:
        .BLKB 1
00009          .BLKB 3
00000000 0000C VALIDATE_PKT_STS:
        .LONG 0
```


.ENTRY	RECORD_SELECTED, Save R2,R3,R4,R5,R6,R7,R8,-;	0844
	R9,R10,R11	:
MOVAB	PARSER_DATA, R11	:
MOVAB	EXCLUDE_MASK, R10	:
MOVAB	OPTION_FLAG, R9	:
MOVAB	SYECOM+24, R8	:
MOVAB	INCLUDE_MASK, R7	:
MOVAB	EMB+4, R6	:
MOVAB	ENTRY_STATUS, R5	:
SUBL2	#4, SP	:
MOVB	#1, INCLUDE_STATUS	0845
MOVB	#1, EXCLUDE_STATUS	:
MOVL	SYECOM+39, LSTLUN	0877
CALLS	#0, VALIDATE_PACKET	0882
BLBS	R0, 1\$:
MOVL	#1, UNKNOWN_ENTRY	0884
BRB	2\$:
CLRL	UNKNOWN_ENTRY	0886
MOVL	OPTION_FLAG, R0	0892
BBC	#14, (R0), 4\$:
MOVL	SUMMARY_FLAG, R0	0893
BBS	#2, (R0), 3\$:
BLBS	(R0), 3\$	0894
BBC	#5, (R0), 4\$	0895
MOVL	#5, (SP)	0897
PUSHL	SP	:
PUSHAB	LSTLUN	:
PUSHAB	SUMMARY_DISPATCHER_ADDR	:
CALLS	#3, EXEC_IMAGE	:

	5B	00000000G	00	9E	00002	
	5A	00000000G	00	9E	00009	
	59	00000000G	00	9E	00010	
	58	00000000G	00	9E	00017	
	57	00000000G	00	9E	0001E	
	56	00000000G	00	9E	00025	
	55	00000000'	00	9E	0002C	
	5E		04	C2	00033	
	54		01	90	00036	
	53		01	90	00039	
	F8	0F	A8	D0	0003C	
	00000000G		00	FB	00041	
	09		50	E8	00048	
	00000000G		01	D0	0004B	
			06	11	00052	
		00000000G	00	D4	00054	1\$:
	50		69	D0	0005A	2\$:
27	60		0E	E1	0005D	
	50	00000000G	00	D0	00061	
07	60		02	E0	00068	
	04		60	E8	0006C	
15	60		05	E1	0006F	
	6E		05	D0	00073	3\$:
			5E	DD	00076	
		F8	A5	9F	00078	
		00000000G	00	9F	0007B	
	00000000G	00	03	FB	00081	

0080	1C	03	A8	E8	00088	4\$:	BLBS	SYECOM+27, 6\$	0902
	8F		66	B1	0008C		CMPW	EMB+4, #128	0903
	7E		15	1F	00091		BLSSU	6\$	
			66	3C	00093		MOVZWL	EMB+4, -(SP)	0906
			01	DD	00096		PUSHL	#1	
00000000G	00	00000000G	8F	DD	00098		PUSHL	#ERF, INCENTRY	
			03	FB	0009E		CALLS	#3, CIBSSIGNAL	
		02E9	31	000A5	5\$:	BRW	69\$		0907
	50		6A	DO	000A8	6\$:	MOVL	EXCLUDE MASK, R0	0914
29	60		12	E1	000AB		BBC	#18, (R0), 9\$	
	50		67	DO	000AF		MOVL	INCLUDE MASK, R0	0915
10	60		14	EO	000B2		BBS	#20, (R0), 7\$	
0C	60		15	EO	000B6		BBS	#21, (R0), 7\$	0916
08	60		09	EO	000BA		BBS	#9, (R0), 7\$	0917
04	60		0D	EO	000BE		BBS	#13, (R0), 7\$	0918
	12	02	A0	E9	000C2		BLBC	2(R0), 9\$	0919
	50		67	DO	000C6	7\$:	MOVL	INCLUDE MASK, R0	0920
07	60		12	E1	000C9		BBC	#18, (R0), 8\$	
	50		69	DO	000CD		MOVL	OPTION_FLAG, R0	0921
			60	B5	000D0		TSTW	(R0)	
			04	19	000D2		BLSS	9\$	
			68	94	000D4	8\$:	CLRB	SYECOM+24	0927
			03	11	000D6		BRB	10\$	
	68		01	90	000D8	9\$:	MOVB	#1, SYECOM+24	0929
	52		69	DO	000DB	10\$:	MOVL	OPTION_FLAG, R2	0934
13	62		03	E1	000DE		BBC	#3, (R2), 11\$	
	51	E8	A8	DO	000E2		MOVL	SYECOM, R1	0942
	50		6B	DO	000E6		MOVL	PARSER_DATA, R0	
19	A0		51	D1	000E9		CMPL	R1, 25(R0)	
			1D	1E	000ED		BGEQU	13\$	
15	A0		51	D1	000EF		CMPL	R1, 21(R0)	0949
			B0	1F	000F3		BLSSU	5\$	
	1B		62	E9	000F5	11\$:	BLBC	(R2), 14\$	0977
50	6B		05	C1	000F8		ADDL3	#5, PARSER_DATA, R0	0985
	51	06	A6	DO	000FC		MOVL	A+4, R1	
04	A0		51	D1	00100		CMPL	R1, 4(R0)	
			04	12	00104		BNEQ	12\$	
	60	02	A6	D1	00106		CMPL	A, (R0)	
			07	1F	0010A	12\$:	BLSSU	14\$	
06	A8		01	90	0010C	13\$:	MOVB	#1, SYECOM+30	0992
		027A	31	00110		BRW	68\$		0993
18	62		0D	E1	00113	14\$:	BBC	#13, (R2), 16\$	1000
50	6B		0D	C1	00117		ADDL3	#13, PARSER_DATA, R0	1008
	51	06	A6	DO	0011B		MOVL	A+4, R1	
04	A0		51	D1	0011F		CMPL	R1, 4(R0)	
			08	12	00123		BNEQ	15\$	
	60	02	A6	D1	00125		CMPL	A, (R0)	
			12	1F	00129		BLSSU	17\$	
			02	11	0012B		BRB	16\$	
			0E	1F	0012D	15\$:	BLSSU	17\$	
0D	62		0C	E1	0012F	16\$:	BBC	#12, (R2), 18\$	1020
	50		6B	DO	00133		MOVL	PARSER_DATA, R0	1026
	FC	A6	01	A0	00136		CMPL	1(R0), -EMB	
			03	13	0013B		BEQL	18\$	
		0251	31	0013D	17\$:	BRW	69\$		
		FD	A5	B4	00140	18\$:	CLRW	DEVICE_STATUS	1035
			65	94	00143		CLRB	ENTRY_STATUS	1037

00000000V	00	00	FB	00145	CALLS	#0, DEVICE TYPE ENTRY	1039
FF	A5	50	90	0014C	MOVB	R0, DEV_TYPE_ENTRY_STS	
	50	69	D0	00150	MOVL	OPTION_FLAG, R0	1041
03	60	06	E0	00153	BBS	#6, (R0), 19\$	
		00F3	31	00157	BRW	41\$	
		00000000G	00	D4	0015A	19\$: CLRL	1044
	OE	FF	A5	E8	00160	BLBS	DEV_TYPE_ENTRY_STS, 20\$
0040	8F		66	B1	00164	CMPW	EMB+4, #64
			07	13	00169	BEQL	20\$
0041	8F		66	B1	0016B	CMPW	EMB+4, #65
			34	12	00170	BNEQ	24\$
	50		67	D0	00172	20\$: MOVL	1051
13	60		14	E1	00175	BBC	#20, (R0), 22\$
00000000V	00		00	FB	00179	CALLS	#0, VERIFY_DEVICE
	06		50	E9	00180	BLBC	R0, 21\$
FD	A5		01	90	00183	MOVB	#1, DEVICE_STATUS
			03	11	00187	BRB	22\$
		FD	A5	94	00189	21\$: CLRB	1058
	50		67	D0	0018C	22\$: MOVL	1061
13	60		15	E1	0018F	BBC	#21, (R0), 24\$
00000000V	00		00	FB	00193	CALLS	#0, VERIFY_DEVICE_CLASS
	06		50	E9	0019A	BLBC	R0, 23\$
FE	A5		01	90	0019D	MOVB	#1, DEV_CLS_STATUS
			03	11	001A1	BRB	24\$
		FE	A5	94	001A3	23\$: CLRB	1068
	50		67	D0	001A6	24\$: MOVL	1072
11	60		16	E1	001A9	BBC	#22, (R0), 26\$
00000000V	00		00	FB	001AD	CALLS	#0, VERIFY_ENTRY
	05		50	E9	001B4	BLBC	R0, 25\$
	65		01	90	001B7	MOVB	#1, ENTRY_STATUS
			02	11	001BA	BRB	26\$
			65	94	001BC	25\$: CLRB	1079
	50		67	D0	001BE	26\$: MOVL	1083
08	60		14	E1	001C1	BBC	#20, (R0), 27\$
	04	FF	A5	E9	001C5	BLBC	DEV_TYPE_ENTRY_STS, 27\$
	13	FD	A5	E8	001C9	BLBS	DEVICE_STATUS, 29\$
08	60		15	E1	001CD	27\$: BBC	1086
	04	FF	A5	E9	001D1	BLBC	DEV_TYPE_ENTRY_STS, 28\$
	07	FE	A5	E8	001D5	BLBS	DEV_CLS_STATUS, 29\$
08	60		16	E1	001D9	28\$: BBC	1089
	05		65	E9	001DD	BLBC	ENTRY_STATUS, 30\$
	54		01	90	001E0	29\$: MOVB	1091
			02	11	001E3	BRB	31\$
			54	94	001E5	30\$: CLRB	1093
2F	60		14	E1	001E7	31\$: BBC	1096
2B	60		16	E1	001EB	BBC	#22, (R0), 36\$
			54	94	001EF	CLRB	INCLUDE STATUS
	11	FC	A5	E9	001F1	BLBC	DEV_SELECTION_REQUIRED, 33\$
	04		65	E9	001F5	BLBC	ENTRY_STATUS, 32\$
	1B	FD	A5	E8	001F8	BLBS	DEVICE_STATUS, 35\$
	1A	FF	A5	E9	001FC	32\$: BLBC	1106
	16	FD	A5	E9	00200	BLBC	DEV_TYPE_ENTRY_STS, 36\$
			11	11	00204	BRB	35\$
	51	FF	A5	9A	00206	33\$: MOVZBL	1108
	07		51	E9	0020A	BLBC	DEV_TYPE_ENTRY_STS, R1
	06	FD	A5	E8	0020D	BLBS	R1, 34\$
	06		51	E8	00211	BLBS	DEVICE_STATUS, 35\$
							R1, 36\$
							1119

	03		65	E9	00214	34\$:	BLBC	ENTRY STATUS, 36\$		
	54		01	90	00217	35\$:	MOVB	#1, INCLUDE STATUS	1121	
2F	60		15	E1	0021A	36\$:	BBC	#21, (R0), 41\$	1126	
2B	60		16	E1	0021E		BBC	#22, (R0), 41\$	1127	
			54	94	00222		CLRB	INCLUDE STATUS	1130	
	11	FC	A5	E9	00224		BLBC	DEV SELECTION REQUIRED, 38\$	1132	
	04		65	E9	00228		BLBC	ENTRY STATUS, 37\$	1135	
	1B	FE	A5	E8	0022B		BLBS	DEV CLS STATUS, 40\$		
	1A	FF	A5	E9	0022F	37\$:	BLBC	DEV TYPE ENTRY_STS, 41\$	1136	
	16	FE	A5	E9	00233		BLBC	DEV CLS STATUS, 41\$		
			11	11	00237		BRB	40\$	1138	
	50	FF	A5	9A	00239	38\$:	MOVZBL	DEV TYPE ENTRY_STS, R0	1142	
	07		50	E9	0023D		BLBC	R0, 39\$		
	06	FE	A5	E8	00240		BLBS	DEV CLS STATUS, 40\$		
	06		50	E8	00244		BLBS	R0, 41\$	1149	
	03		65	E9	00247	39\$:	BLBC	ENTRY STATUS, 41\$		
	54		01	90	0024A	40\$:	MOVB	#1, INCLUDE STATUS	1151	
	50		69	D0	0024D	41\$:	MOVL	OPTION FLAG, R0	1162	
03	60		04	E0	00250		BBS	#4, (R0), 42\$		
			00F4	31	00254		BRW	64\$		
	00000000G		01	D0	00257	42\$:	MOVL	#1, EXCLUDE FLAG	1165	
			0E	A5	E8	0025E	BLBS	DEV TYPE ENTRY_STS, 43\$	1167	
	0040		8F	66	B1	00262	CMPW	EMB+4, #64	1168	
				07	13	00267	BEQL	43\$		
	0041		8F	66	B1	00269	CMPW	EMB+4, #65	1169	
				34	12	0026E	BNEQ	47\$		
	50		6A	D0	00270	43\$:	MOVL	EXCLUDE MASK, R0	1172	
13	60		14	E1	00273		BBC	#20, (R0), 45\$		
	00000000V		00	FB	00277		CALLS	#0, VERIFY_DEVICE	1175	
			50	E9	0027E		BLBC	R0, 44\$		
	FD		01	90	00281		MOVB	#1, DEVICE_STATUS	1177	
			03	11	00285		BRB	45\$		
		FD	A5	94	00287	44\$:	CLRB	DEVICE STATUS	1179	
	50		6A	D0	0028A	45\$:	MOVL	EXCLUDE MASK, R0	1182	
13	60		15	E1	0028D		BBC	#21, (R0), 47\$		
	00000000V		00	FB	00291		CALLS	#0, VERIFY_DEVICE_CLASS	1185	
			50	E9	00298		BLBC	R0, 46\$		
	FE		01	90	0029B		MOVB	#1, DEV_CLS_STATUS	1187	
			03	11	0029F		BRB	47\$		
		FE	A5	94	002A1	46\$:	CLRB	DEV CLS STATUS	1189	
	50		6A	D0	002A4	47\$:	MOVL	EXCLUDE MASK, R0	1193	
11	60		16	E1	002A7		BBC	#22, (R0), 49\$		
	00000000V		00	FB	002AB		CALLS	#0, VERIFY_ENTRY	1196	
			50	E9	002B2		BLBC	R0, 48\$		
			01	90	002B5		MOVB	#1, ENTRY_STATUS	1198	
			02	11	002B8		BRB	49\$		
			65	94	002BA	48\$:	CLRB	ENTRY STATUS	1200	
	50		6A	D0	002BC	49\$:	MOVL	EXCLUDE MASK, R0	1203	
08	60		14	E1	002BF		BBC	#20, (R0), 50\$		
	04	FF	A5	E9	002C3		BLBC	DEV TYPE ENTRY_STS, 50\$	1204	
	13	FD	A5	E8	002C7		BLBS	DEVICE STATUS, 52\$		
08	60		15	E1	002CB	50\$:	BBC	#21, (R0), 51\$	1206	
	04	FF	A5	E9	002CF		BLBC	DEV TYPE ENTRY_STS, 51\$	1207	
	07	FE	A5	E8	002D3		BLBS	DEV CLS STATUS, 52\$		
07	60		16	E1	002D7	51\$:	BBC	#22, (R0), 53\$	1209	
			65	E9	002DB		BLBC	ENTRY STATUS, 53\$		
	04		53	94	002DE	52\$:	CLRB	EXCLUDE STATUS	1211	

			03	11	002E0		BRB	54\$		
			01	90	002E2	53\$:	MOVB	#1, EXCLUDE STATUS		1213
2F			14	E1	002E5	54\$:	BBC	#20, (R0), 59\$		1216
2B			16	E1	002E9		BBC	#22, (R0), 59\$		1217
			01	90	002ED		MOVB	#1, EXCLUDE STATUS		1220
		FC	A5	E9	002F0		BLBC	DEV_SELECTION_REQUIRED, 56\$		1222
			65	E9	002F4		BLBC	ENTRY STATUS, 55\$		1225
		FD	A5	E8	002F7		BLBS	DEVICE STATUS, 58\$		
		FF	A5	E9	002FB	55\$:	BLBC	DEV_TYPE_ENTRY_STS, 59\$		1226
		FD	A5	E9	002FF		BLBC	DEVICE STATUS, 59\$		
			11	11	00303		BRB	58\$		1228
		FF	A5	9A	00305	56\$:	MOVZBL	DEV_TYPE_ENTRY_STS, R1		1232
			51	E9	00309		BLBC	R1, 57\$		
		FD	A5	E8	0030C		BLBS	DEVICE STATUS, 58\$		
			51	E8	00310		BLBS	R1, 59\$		1239
			65	E9	00313	57\$:	BLBC	ENTRY STATUS, 59\$		
			53	94	00316	58\$:	CLRB	EXCLUDE STATUS		1241
			15	E1	00318	59\$:	BBC	#21, (R0), 64\$		1246
2F			16	E1	0031C		BBC	#22, (R0), 64\$		1247
2B			01	90	00320		MOVB	#1, EXCLUDE STATUS		1250
		FC	A5	E9	00323		BLBC	DEV_SELECTION_REQUIRED, 61\$		1252
			65	E9	00327		BLBC	ENTRY STATUS, 60\$		1255
		FE	A5	E8	0032A		BLBS	DEV_CLS STATUS, 63\$		
		FF	A5	E9	0032E	60\$:	BLBC	DEV_TYPE_ENTRY_STS, 64\$		1256
		FE	A5	E9	00332		BLBC	DEV_CLS STATUS, 64\$		
			11	11	00336		BRB	63\$		1258
		FF	A5	9A	00338	61\$:	MOVZBL	DEV_TYPE_ENTRY_STS, R0		1262
			50	E9	0033C		BLBC	R0, 62\$		
		FE	A5	E8	0033F		BLBS	DEV_CLS STATUS, 63\$		
			50	E8	00343		BLBS	R0, 64\$		1269
			65	E9	00346	62\$:	BLBC	ENTRY STATUS, 64\$		
			53	94	00349	63\$:	CLRB	EXCLUDE STATUS		1271
			54	E9	0034B	64\$:	BLBC	INCLUDE STATUS, 67\$		1285
			53	E9	0034E		BLBC	EXCLUDE STATUS, 67\$		
			6B	D0	00351		MOVL	PARSER DATA, R0		1286
			60	91	00354		CMPB	(R0), #2		
			27	12	00357		BNEQ	67\$		
			66	3C	00359		MOVZWL	EMB+4, R0		1292
0063			50	B1	0035C		CMPW	R0, #99		
			07	13	00361		BEQL	65\$		
0064			50	B1	00363		CMPW	R0, #100		1293
			0C	12	00368		BNEQ	66\$		
		F8	A5	9F	0036A	65\$:	PUSHAB	LSTLUN		1299
00000000G		00	01	FB	0036D		CALLS	#1, INTERVENE_INCREMENT		
			0A	11	00374		BRB	67\$		
		F8	A5	9F	00376	66\$:	PUSHAB	LSTLUN		1305
00000000G		00	01	FB	00379		CALLS	#1, INTERVENE_OUTPUT		
		06	00	E8	00380	67\$:	BLBS	UNKNOWN_ENTRY, 68\$		1313
		07	54	E9	00387		BLBC	INCLUDE STATUS, 69\$		1320
		04	53	E9	0038A		BLBC	EXCLUDE STATUS, 69\$		1321
		50	01	D0	0038D	68\$:	MOVL	#1, R0		1333
				04	00390		RET			
			50	D4	00391	69\$:	CLRL	R0		1335
				04	00393		RET			

; Routine Size: 916 bytes, Routine Base: \$CODE + 0000

Entry Validation

15^N-Sep-1984 23:52:05
14-Sep-1984 12:28:02

VAX-11 BLiss-32 V4.0-742
[ERF.SRC]RECSELECT.B32;1

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(2)

: 769
: 770

1336	1
1337	1

REC
V04

.....


```

772 1338 1 ROUTINE VERIFY_ENTRY =
773 1339 2 Begin
774 1340 2
775 1341 2 ++
776 1342 2
777 1343 2 Functional Description:
778 1344 2
779 1345 2 This routine will determine if the current entry matches
780 1346 2 any of the selected entry types. It return TRUE if the
781 1347 2 current entry matches or return FALSE if the current entry
782 1348 2 does NOT match.
783 1349 2
784 1350 2 Calling sequence:
785 1351 2
786 1352 2 VERIFY_ENTRY ()
787 1353 2
788 1354 2 Input parameters:
789 1355 2
790 1356 2 None
791 1357 2
792 1358 2 Output parameters:
793 1359 2
794 1360 2 None
795 1361 2
796 1362 2 --
797 1363 2
798 1364 2
799 1365 2
800 1366 2 Initialize a status indicator.
801 1367 2
802 1368 2 Dev_selection_required = false ;
803 1369 2
804 1370 2
805 1371 2 Determine if device attention entries are selected.
806 1372 2
807 1373 2 If ((.exclude_mask[exc$v_dev_attentions]) OR
808 1374 2 (.include_mask[inc$v_dev_attentions]))
809 1375 2 Then
810 1376 2
811 1377 2 Determine if this entry is for a device attention.
812 1378 2
813 1379 2 Begin
814 1380 2 Dev_selection_required = true ;
815 1381 2 If .emb[emb$w_hd_entry] EQLU EMB$K_DA
816 1382 2 Then
817 1383 2
818 1384 2 Indicate that this entry does match a selected entry
819 1385 2 type, by returning to the calling routine with a
820 1386 2 true value.
821 1387 2
822 1388 2 Return true ;
823 1389 2 End ;
824 1390 2
825 1391 2
826 1392 2 Determine if bugcheck entries are selected.
827 1393 2
828 1394 2 If ((.exclude_mask[exc$v_bugchks]) OR
```



```

: 829      1395 3      (.include_mask[inc$V_bugchks]))
: 830      1396 2      Then
: 831      1397 2      |
: 832      1398 2      | Determine if this entry is for a bugcheck.
: 833      1399 2      |
: 834      1400 3      | Begin
: 835      1401 3      |   Incr I from 0 to 2 do
: 836      1402 4      |     Begin
: 837      1403 4      |       If .emb[emb$w_hd_entry] EQLU .bugchks[.I]
: 838      1404 4      |       Then
: 839      1405 4      |         |
: 840      1406 4      |         | Indicate that this entry does match a selected
: 841      1407 4      |         | entry type, by returning to the calling routine
: 842      1408 4      |         | with a true value.
: 843      1409 4      |         |
: 844      1410 4      |         | Return true ;
: 845      1411 3      |       End ;
: 846      1412 2      |     End ;
: 847      1413 2      |
: 848      1414 2      | Determine if 'control entries' are selected.
: 849      1415 2      |
: 850      1416 2      | If ((.exclude_mask[exc$V_control_entry]) OR
: 851      1417 3      |   (.include_mask[inc$V_control_entry]))
: 852      1418 3      | Then
: 853      1419 2      | |
: 854      1420 2      | | Determine if this entry is a 'control entry'.
: 855      1421 2      | |
: 856      1422 2      | | Begin
: 857      1423 3      | |   Incr I from 0 to 6 do
: 858      1424 3      | |     Begin
: 859      1425 4      | |       If .emb[emb$w_hd_entry] EQLU .control[.I]
: 860      1426 4      | |       Then
: 861      1427 4      | |         |
: 862      1428 4      | |         | Indicate that this entry does match a selected
: 863      1429 4      | |         | entry type, by returning to the calling routine
: 864      1430 4      | |         | with a true value.
: 865      1431 4      | |         |
: 866      1432 4      | |         | Return true ;
: 867      1433 4      | |       End ;
: 868      1434 3      | |     End ;
: 869      1435 2      | |   End ;
: 870      1436 2      | |
: 871      1437 2      | | Determine if 'cpu entries' are selected.
: 872      1438 2      | |
: 873      1439 2      | | If ((.exclude_mask[exc$V_cpu_entry]) OR
: 874      1440 3      | |   (.include_mask[inc$V_cpu_entry]))
: 875      1441 3      | | Then
: 876      1442 2      | | |
: 877      1443 2      | | | Determine if this entry is a 'cpu entry'.
: 878      1444 2      | | |
: 879      1445 2      | | | Begin
: 880      1446 3      | | |   Incr I from 0 to 7 do
: 881      1447 3      | | |     Begin
: 882      1448 4      | | |       If .emb[emb$w_hd_entry] EQLU .cpu[.I]
: 883      1449 4      | | |       Then
: 884      1450 4      | | |         |
: 885      1451 4      | | |         |

```



```

: 886      1452 4      | Indicate that this entry does match a selected
: 887      1453 4      | entry type, by returning to the calling routine
: 888      1454 4      | with a true value.
: 889      1455 4      |
: 890      1456 4      | Return true ;
: 891      1457 3      | End ;
: 892      1458 2      | End ;
: 893      1459 2      |
: 894      1460 2      |
: 895      1461 2      | Determine if device errors are selected.
: 896      1462 2      |
: 897      1463 3      | If ((.exclude_mask[exc$v_dev_errors]) OR
: 898      1464 3      | (.include_mask[inc$v_dev_errors]))
: 899      1465 2      | Then
: 900      1466 2      |
: 901      1467 2      | Determine if this entry is a device error.
: 902      1468 2      |
: 903      1469 3      | Begin
: 904      1470 3      | Dev_selection_required = true ;
: 905      1471 3      |
: 906      1472 3      | Incr I from 0 to 2 do
: 907      1473 4      | Begin
: 908      1474 4      | If .emb[emb$w_hd_entry] EQLU .dev_errors[I]
: 909      1475 4      | Then
: 910      1476 4      |
: 911      1477 4      | Indicate that this entry does match a selected
: 912      1478 4      | entry type, by returning to the calling routine
: 913      1479 4      | with a true value.
: 914      1480 4      |
: 915      1481 4      | Return true ;
: 916      1482 3      | End ;
: 917      1483 2      | End ;
: 918      1484 2      |
: 919      1485 2      |
: 920      1486 2      | Determine if machine checks are selected.
: 921      1487 2      |
: 922      1488 3      | If ((.exclude_mask[exc$v_machine_chks]) OR
: 923      1489 3      | (.include_mask[inc$v_machine_chks]))
: 924      1490 2      | Then
: 925      1491 2      |
: 926      1492 2      | Determine if this entry is a machine check.
: 927      1493 2      |
: 928      1494 3      | Begin
: 929      1495 3      | If .emb[emb$w_hd_entry] EQLU EMB$K_MC
: 930      1496 3      | Then
: 931      1497 3      |
: 932      1498 3      | Indicate that this entry does match a selected
: 933      1499 3      | entry type, by returning to the calling routine
: 934      1500 3      | with a true value.
: 935      1501 3      |
: 936      1502 3      | Return true ;
: 937      1503 2      | End ;
: 938      1504 2      |
: 939      1505 2      |
: 940      1506 2      | Determine if memory entries are selected.
: 941      1507 2      |
: 942      1508 3      | If ((.exclude_mask[exc$v_memory]) OR
```

```

943 1509 3      (.include_mask[inc$memory]))
944 1510 2      Then
945 1511 2
946 1512 2      Determine if this entry is a 'memory entry'.
947 1513 2
948 1514 3      Begin
949 1515 3      Incr I from 0 to 1 do
950 1516 4      Begin
951 1517 4      If .emb[emb$w_hd_entry] EQLU .memorys[I]
952 1518 4      Then
953 1519 4
954 1520 4      Determine if this entry does match a selected
955 1521 4      entry type, by returning to the calling routine
956 1522 4      with a true value.
957 1523 4
958 1524 4      Return true ;
959 1525 3      End ;
960 1526 2      End ;
961 1527 2
962 1528 2      Determine if device timeouts are selected.
963 1529 2
964 1530 2
965 1531 3      If ((.exclude_mask[exc$v_dev_timeouts]) OR
966 1532 3      (.include_mask[inc$v_dev_timeouts]))
967 1533 2      Then
968 1534 2
969 1535 2      Determine if this entry is a device timeouts.
970 1536 2
971 1537 3      Begin
972 1538 3      Dev_selection_required = true ;
973 1539 3
974 1540 3      If .emb[emb$w_hd_entry] EQLU EMB$K_DT
975 1541 3      Then
976 1542 3
977 1543 3      Determine if this entry does match a selected
978 1544 3      entry type, by returning to the calling routine
979 1545 3      with a true value.
980 1546 3
981 1547 3      Return true ;
982 1548 2      End ;
983 1549 2
984 1550 2
985 1551 2      Determine if unknown entries have been selected.
986 1552 2      If unknown entries have not been excluded, then see if this is an
987 1553 2      unknown entry. If it is set UNKNOWN_ENTRY true.
988 1554 2
989 1555 2      Initialize the unknown entry indicator (not an unknown entry).
990 1556 2
991 1557 2
992 1558 3      If ((.exclude_mask[exc$v_unknown_entry]) OR
993 1559 3      (.include_mask[inc$v_unknown_entry]))
994 1560 2      Then
995 1561 2
996 1562 2      Determine if this is an unknown entry.
997 1563 2
998 1564 3      Begin
999 1565 3      If .unknown_entry
```



```
1000 1566 3 Then Return true ;
1001 1567 2 End ;
1002 1568 2
1003 1569 2
1004 1570 2 Determine if unsolicited mscp entries are selected.
1005 1571 2
1006 1572 2 If ((.exclude_mask[exc$v_unsol_mscp]) OR
1007 1573 2 (.include_mask[inc$v_unsol_mscp]))
1008 1574 2 Then
1009 1575 2
1010 1576 2 Determine if this entry is an unsolicited mscp entry.
1011 1577 2
1012 1578 2 Begin
1013 1579 2 If .emb[emb$w_hd_entry] EQLU EMB$K_LOGMSCP
1014 1580 2 Then
1015 1581 2
1016 1582 2 Indicate that this entry does match a selected
1017 1583 2 entry type, by returning to the calling routine
1018 1584 2 with a true value.
1019 1585 2
1020 1586 2 Return true ;
1021 1587 2 End ;
1022 1588 2
1023 1589 2
1024 1590 2 Determine if volume changes are to be excluded.
1025 1591 2
1026 1592 2 If ((.exclude_mask[exc$v_volume])
1027 1593 2 OR (.include_mask[inc$v_volume]))
1028 1594 2 Then
1029 1595 2
1030 1596 2 Determine if this entry is a volume entry.
1031 1597 2
1032 1598 2 Begin
1033 1599 2 Dev_selection_required = true ;
1034 1600 2
1035 1601 2 Incr I from 0 to 1 do
1036 1602 2 Begin
1037 1603 2 If .emb[emb$w_hd_entry] EQLU .volume[I]
1038 1604 2 Then
1039 1605 2
1040 1606 2 Indicate that this entry does match a selected
1041 1607 2 entry type, by returning to the calling routine
1042 1608 2 with a true value.
1043 1609 2
1044 1610 2 Return true ;
1045 1611 2 End ;
1046 1612 2 End ;
1047 1613 2
1048 1614 2
1049 1615 2 Indicate that this entry does not match any of the selected
1050 1616 2 entry types, by returning to the calling routine with a
1051 1617 2 false value.
1052 1618 2
1053 1619 2 Return false ;
1054 1620 1 End ; ! Routine
```

		003C	00000	VERIFY_ENTRY:			
				.WORD	Save R2,R3,R4,R5	1338	
		55	00000000G	00 9E 00002	MOVAB	EMB+4, R5	
		54	00000000G	00 9E 00009	MOVAB	DEV_SELECTION_REQUIRED, R4	
		53	00000000G	00 9E 00010	MOVAB	INCLUDE_MASK, R3	
				64 94 00017	CLRB	DEV_SELECTION_REQUIRED	1368
		51	00000000G	00 D0 00019	MOVL	EXCLUDE_MASK, R1	1373
07		61		09 E0 00020	BBS	#9, (R1), 1\$	
		50		63 D0 00024	MOVL	INCLUDE_MASK, R0	1374
0A		60		09 E1 00027	BBC	#9, (R0), 2\$	
		64		01 90 0002B	1\$: MOVB	#1, DEV_SELECTION_REQUIRED	1380
	0062	8F		65 B1 0002E	CMPW	EMB+4, #98	1381
				7D 13 00033	BEQL	16\$	
07		61		0A E0 00035	2\$: BBS	#10, (R1), 3\$	1394
		50		63 D0 00039	MOVL	INCLUDE_MASK, R0	1395
10		60		0A E1 0003C	BBC	#10, (R0), 5\$	
				50 D4 00040	3\$: CLRL	I	1403
		52	OC A440	9A 00042	4\$: MOVZBL	BUGCHKS[I], R2	
		65		52 B1 00047	CMPW	R2, EMB+4	
				7D 13 0004A	BEQL	20\$	
F2		50		02 F3 0004C	AOBLEQ	#2, I, 4\$	1401
07		61		0B E0 00050	5\$: BBS	#11, (R1), 6\$	1417
		50		63 D0 00054	MOVL	INCLUDE_MASK, R0	1418
10		60		0B E1 00057	BBC	#11, (R0), 8\$	
				50 D4 0005B	6\$: CLRL	I	1426
		52	10 A440	9A 0005D	7\$: MOVZBL	CONTROL[I], R2	
		65		52 B1 00062	CMPW	R2, EMB+4	
				7B 13 00065	BEQL	23\$	
F2		50		06 F3 00067	AOBLEQ	#6, I, 7\$	1424
07		61		0C E0 0006B	8\$: BBS	#12, (R1), 9\$	1440
		50		63 D0 0006F	MOVL	INCLUDE_MASK, R0	1441
10		60		0C E1 00072	BBC	#12, (R0), 11\$	
				50 D4 00076	9\$: CLRL	I	1449
		52	18 A440	9A 00078	10\$: MOVZBL	CPU[I], R2	
		65		52 B1 0007D	CMPW	R2, EMB+4	
				60 13 00080	BEQL	23\$	
F2		50		07 F3 00082	AOBLEQ	#7, I, 10\$	1447
07		61		0D E0 00086	11\$: BBS	#13, (R1), 12\$	1463
		50		63 D0 0008A	MOVL	INCLUDE_MASK, R0	1464
13		60		0D E1 0008D	BBC	#13, (R0), 14\$	
		64		01 90 00091	12\$: MOVB	#1, DEV_SELECTION_REQUIRED	1470
				50 D4 00094	CLRL	I	1474
		52	20 A440	9A 00096	13\$: MOVZBL	DEV_ERRORS[I], R2	
		65		52 B1 0009B	CMPW	R2, EMB+4	
				66 13 0009E	BEQL	28\$	
F2		50		02 F3 000A0	AOBLEQ	#2, I, 13\$	1472
07		61		0E E0 000A4	14\$: BBS	#14, (R1), 15\$	1488
		50		63 D0 000A8	MOVL	INCLUDE_MASK, R0	1489
05		60		0E E1 000AB	BBC	#14, (R0), 17\$	
		02		65 B1 000AF	15\$: CMPW	EMB+4, #2	1495
				6E 13 000B2	16\$: BEQL	32\$	
				61 B5 000B4	17\$: TSTW	(R1)	1508
				07 19 000B6	BLSS	18\$	
		50		63 D0 000B8	MOVL	INCLUDE_MASK, R0	1509

		60	B5	000BB	TSTW	(R0)	:
		10	18	000BD	BGEQ	21\$:
		50	D4	000BF	CLRL	I	1517
	52	24	A440	9A 000C1	MOVZBL	MEMORYS[I], R2	:
	65			B1 000C6	CMPW	R2, EMB+4	:
		57	13	000C9	BEQL	32\$:
F2	50		01	F3 000CB	AOBLEQ	#1, I, 19\$	1515
	07	02	A1	E8 000CF	BLBS	2(R1), 22\$	1531
	50		63	D0 000D3	MOVL	INCLUDE MASK, R0	1532
	0A	02	A0	E9 000D6	BLBC	2(R0), 24\$:
	64		01	90 000DA	MOVB	#1, DEV_SELECTION_REQUIRED	1538
0060	8F		65	B1 000DD	CMPW	EMB+4, #96	1540
		3E	13	000E2	BEQL	32\$:
07	61		13	E0 000E4	BBS	#19, (R1), 25\$	1558
	50		63	D0 000E8	MOVL	INCLUDE MASK, R0	1559
07	60		13	E1 000EB	BBC	#19, (R0), 26\$:
	2C	00000000G	00	E8 000EF	BLBS	UNKNOWN ENTRY, 32\$	1565
07	61		11	E0 000F6	BBS	#17, (R1), 27\$	1572
	50		63	D0 000FA	MOVL	INCLUDE MASK, R0	1573
07	60		11	E1 000FD	BBC	#17, (R0), 29\$:
0065	8F		65	B1 00101	CMPW	EMB+4, #101	1579
			1A	13 00106	BEQL	32\$:
07	61		12	E0 00108	BBS	#18, (R1), 30\$	1592
	50		63	D0 0010C	MOVL	INCLUDE MASK, R0	1593
17	60		12	E1 0010F	BBC	#18, (R0), 34\$:
	64		01	90 00113	MOVB	#1, DEV_SELECTION_REQUIRED	1599
			50	D4 00116	CLRL	I	1603
	51	28	A440	9A 00118	MOVZBL	VOLUME[I], R1	:
	65		51	B1 0011D	CMPW	R1, EMB+4	:
			04	12 00120	BNEQ	33\$:
	50		01	D0 00122	MOVL	#1, R0	1610
			04	00125	RET		:
EE	50		01	F3 00126	AOBLEQ	#1, I, 31\$	1601
			50	D4 0012A	CLRL	R0	1619
			04	0012C	RET		1620

; Routine Size: 301 bytes, Routine Base: \$CODE + 0394

; 1055 1621 1

```
1057 1622 1 GLOBAL ROUTINE DEVICE_TYPE_ENTRY =
1058 1623 2 Begin
1059 1624 2
1060 1625 2 ++
1061 1626 2
1062 1627 2 Functional Description:
1063 1628 2
1064 1629 2 This routine will determine if the current entry is a device
1065 1630 2 type entry; (device attention, device error, device timeout,
1066 1631 2 volume dismount, volume mount). It return TRUE if the current
1067 1632 2 entry matches any of the device type entries or return FALSE
1068 1633 2 if the current entry does NOT match.
1069 1634 2
1070 1635 2 Calling sequence:
1071 1636 2
1072 1637 2 DEVICE_ENTRY_TYPE ()
1073 1638 2
1074 1639 2 Input parameters:
1075 1640 2
1076 1641 2 None
1077 1642 2
1078 1643 2 Output parameters:
1079 1644 2
1080 1645 2 None
1081 1646 2
1082 1647 2 --
1083 1648 2
1084 1649 2 OWN
1085 1650 2 Device_entries: VECTOR [6,byte,unsigned] ! Storage for device type
1086 1651 2 ! entries.
1087 1652 2 Initial (BYTE
1088 1653 2 (EMBSK_DA, ! Device attentions
1089 1654 2 EMBSK_DE, ! Device errors
1090 1655 2 EMBSK_DT, ! Device timeouts
1091 1656 2 EMBSK_LM,
1092 1657 2 EMBSK_SP, ! Log message
1093 1658 2 EMBSK_LOGMSCP)) ; ! Unsolicited mscp msg
1094 1659 2
1095 1660 2
1096 1661 2 Determine if the current entry is a device type entry.
1097 1662 2
1098 1663 2 Incr I from 0 to 5 do
1099 1664 2 Begin
1100 1665 2 If .emb[emb$w_hd_entry] EQLU .device_entries[I]
1101 1666 2 Then
1102 1667 2
1103 1668 2 Indicate that this is a device type entry, by
1104 1669 2 returning to the calling routine with a true value.
1105 1670 2
1106 1671 2 Return true ;
1107 1672 2 End ;
1108 1673 2
1109 1674 2
1110 1675 2 Indicate that this is NOT a device type entry, by returning
1111 1676 2 to the calling routine with a false value.
1112 1677 2
1113 1678 2 Return false ;
```



```

; 1114      1679 2
; 1115      1680 1 End ; ! Routine

```

```

        .PSECT $OWNS,NOEXE, PIC,2
        0002E .BLKB 2
65 63 64 60 01 62 00030 DEVICE_ENTRIES:
        .BYTE 98, 1, 96, 100, 99, 101

```

```
.PSECT $CODE,NOWRT, PIC,2
```

Label	Offset	Hex	Assembly	Comment	Address
	0000	00000	.ENTRY	DEVICE_TYPE_ENTRY, Save nothing	1622
	50	D4 00002	CLRL	I	1665
	51	9A 00004	MOVZBL	DEVICE_ENTRIES[I], R1	
00000000G	00	B1 0000C	CMPW	R1, EMB+4	
	04	12 00013	BNEQ	2\$	
	50	01 D0 00015	MOVL	#1, R0	1671
		04 00018	RET		
E7	50	05 F3 00019	AOBLEQ	#5, I, 1\$	1663
	50	D4 0001D	CLRL	R0	1678
		04 0001F	RET		1680

; Routine Size: 32 bytes, Routine Base: \$CODE + 04C1

; 1116 1681 1

```
1118 1682 1 ROUTINE VERIFY_DEVICE_CLASS =
1119 1683 2 Begin
1120 1684 2
1121 1685 2 ++
1122 1686 2
1123 1687 2 Functional Description:
1124 1688 2
1125 1689 2 This routine will determine if the device recorded by the
1126 1690 2 current entry matches any of the selected device class(es).
1127 1691 2 It return TRUE if the current entry matches or return FALSE
1128 1692 2 if the current entry does NOT match.
1129 1693 2
1130 1694 2 Calling sequence:
1131 1695 2
1132 1696 2 VERIFY_DEVICE_CLASS ( )
1133 1697 2
1134 1698 2 Input parameters:
1135 1699 2
1136 1700 2 None
1137 1701 2
1138 1702 2 Output parameters:
1139 1703 2
1140 1704 2 None
1141 1705 2
1142 1706 2 --
1143 1707 2
1144 1708 2
1145 1709 2 Determine whether this is a unsolicited mscp entry and
1146 1710 2 whether to continue.
1147 1711 2
1148 1712 2 If .emb[emb$w_hd_entry] EQLU EMB$K_LOGMSCP AND
1149 1713 2 NOT .include_mask[inc$v_disks] AND
1150 1714 2 NOT .include_mask[inc$v_tapes]
1151 1715 2 Then
1152 1716 2 Return false ;
1153 1717 2
1154 1718 2
1155 1719 2 Determine if 'BUS' entries are selected.
1156 1720 2
1157 1721 2 If ((.exclude_mask[exc$v_buses]) OR
1158 1722 2 (.include_mask[inc$v_buses]))
1159 1723 2 Then
1160 1724 2
1161 1725 2 Determine if the device recorded by this entry, matches the
1162 1726 2 selected device class.
1163 1727 2
1164 1728 2 Begin
1165 1729 2 If ((.emb[emb$w_hd_entry] EQLU EMB$K_LM AND
1166 1730 2 .emb[emb$b_lm_class] EQLU DC$_BUST) OR
1167 1731 2
1168 1732 2 ((.emb[emb$w_hd_entry] EQLU EMB$K_SP AND
1169 1733 2 .emb[emb$b_sp_class] EQLU DC$_BUST) OR
1170 1734 2
1171 1735 2 (.emb[emb$b_dv_class] EQLU DC$_BUS)
1172 1736 2 Then
1173 1737 2
1174 1738 2 Indicate that this entry does match a selected device
```



```
: 1175      1739      3      | class, by returning to the calling routine with a
: 1176      1740      3      | true value.
: 1177      1741      3      |
: 1178      1742      3      | Return true ;
: 1179      1743      2      | End ;
: 1180      1744      2      |
: 1181      1745      2      |
: 1182      1746      2      | Determine if 'DISK' entries are selected.
: 1183      1747      2      |
: 1184      1748      3      | If ((.exclude_mask[exc$v_disks]) OR
: 1185      1749      3      |   (.include_mask[inc$v_disks]))
: 1186      1750      2      | Then
: 1187      1751      2      |
: 1188      1752      2      | Determine if the device recorded by this entry, matches the
: 1189      1753      2      | selected device class.
: 1190      1754      2      |
: 1191      1755      3      | Begin
: 1192      1756      4      | If ((.emb[emb$w_hd_entry] EQLU EMB$K_VM) OR
: 1193      1757      4      |   (.emb[emb$w_hd_entry] EQLU EMB$K_VD))
: 1194      1758      3      | Then
: 1195      1759      3      |
: 1196      1760      3      | Determine if the device recorded by this volume
: 1197      1761      3      | mount or dismount is a 'disk' type device.
: 1198      1762      3      |
: 1199      1763      4      | Begin
: 1200      1764      4      | If NOT TRANSLATE_CLASS (emb[emb$t_vm_namtxt],DC$_DISK)
: 1201      1765      4      | Then
: 1202      1766      4      |
: 1203      1767      4      | Indicate that the device recorded by this entry is
: 1204      1768      4      | not a 'disk', by returning to the calling routine
: 1205      1769      4      | with a false value.
: 1206      1770      4      |
: 1207      1771      4      | Return false
: 1208      1772      4      | Else
: 1209      1773      4      | Return true ;
: 1210      1774      3      | End ;
: 1211      1775      3      |
: 1212      1776      5      | If ( ((.emb[emb$w_hd_entry] EQLU EMB$K_LM) AND
: 1213      1777      4      |   (.emb[emb$b_m_class] EQLU DC$_DISK)) OR
: 1214      1778      4      |
: 1215      1779      5      |   ((.emb[emb$w_hd_entry] EQLU EMB$K_SP) AND
: 1216      1780      4      |   (.emb[emb$b_sp_class] EQLU DC$_DISK)) OR
: 1217      1781      4      |
: 1218      1782      4      | Entry type must be either a device error, timeout, or attention.
: 1219      1783      4      |
: 1220      1784      4      |   (.emb[emb$b_dv_class] EQLU DC$_DISK) )
: 1221      1785      3      | Then
: 1222      1786      3      |
: 1223      1787      3      | Indicate that this entry does match a selected
: 1224      1788      3      | device class, by returning to the calling routine
: 1225      1789      3      | with a true value.
: 1226      1790      3      |
: 1227      1791      3      | Return true ;
: 1228      1792      3      |
: 1229      1793      3      |
: 1230      1794      3      | Determine whether this is disk related unsolicited mscp entry.
: 1231      1795      3      |
```

```
: 1232      1796      3      If .emb[emb$w_hd_entry] EQLU EMB$K_LOGMSCP AND
: 1233      1797      3      CH$EQL (2,emb[driver_type],2,CH$PTR(uplit('DISK'))))
: 1234      1798      3      Then
: 1235      1799      3      | Yes, return to the calling routine with a true value.
: 1236      1800      3      |
: 1237      1801      3      | Return true ;
: 1238      1802      3      End ;
: 1239      1803      3
: 1240      1804      3      |
: 1241      1805      3      | Determine if 'REALTIME' entries are selected.
: 1242      1806      3      |
: 1243      1807      3      | If ((.exclude_mask[exc$v_realtime]) OR
: 1244      1808      3      |   (.include_mask[inc$v_realtime]))
: 1245      1809      3      | Then
: 1246      1810      3      |
: 1247      1811      3      | | Determine if the device recorded by this entry, matches the
: 1248      1812      3      | | selected device class.
: 1249      1813      3      | |
: 1250      1814      3      | | Begin
: 1251      1815      3      | | If .emb[emb$b_dv_class] EQLU DC$_REALTIME
: 1252      1816      3      | | Then
: 1253      1817      3      | | |
: 1254      1818      3      | | | Indicate that this entry does match a selected
: 1255      1819      3      | | | device class, by returning to the calling routine
: 1256      1820      3      | | | with a true value.
: 1257      1821      3      | | |
: 1258      1822      3      | | | Return true ;
: 1259      1823      3      | | End ;
: 1260      1824      3      | |
: 1261      1825      3      | |
: 1262      1826      3      | | Determine if 'SYNCHRONOUS COMMUNICATION' entries are selected.
: 1263      1827      3      | |
: 1264      1828      3      | | If ((.exclude_mask[exc$v_sync_comm]) OR
: 1265      1829      3      | |   (.include_mask[inc$v_sync_comm]))
: 1266      1830      3      | | Then
: 1267      1831      3      | | |
: 1268      1832      3      | | | Determine if the device recorded by this entry, matches the
: 1269      1833      3      | | | selected device class.
: 1270      1834      3      | | |
: 1271      1835      3      | | | Begin
: 1272      1836      3      | | | If .emb[emb$b_dv_class] EQLU DC$_SCOM
: 1273      1837      3      | | | Then
: 1274      1838      3      | | | |
: 1275      1839      3      | | | | Indicate that this entry does match a selected
: 1276      1840      3      | | | | device class, by returning to the calling routine
: 1277      1841      3      | | | | with a true value.
: 1278      1842      3      | | | |
: 1279      1843      3      | | | | Return true ;
: 1280      1844      3      | | | End ;
: 1281      1845      3      | |
: 1282      1846      3      | |
: 1283      1847      3      | | Determine if 'TAPE' entries are selected.
: 1284      1848      3      | |
: 1285      1849      3      | | If ((.exclude_mask[exc$v_tapes]) OR
: 1286      1850      3      | |   (.include_mask[inc$v_tapes]))
: 1287      1851      3      | | Then
: 1288      1852      3      | | |
```



```
: 1289      1853 2      ! Determine if the device recorded by this entry, matches the
: 1290      1854 2      ! selected device class.
: 1291      1855 2
: 1292      1856 3      Begin
: 1293      1857 4      If ((.emb[emb$w_hd_entry] EQLU EMB$K_VM) OR
: 1294      1858 4      (.emb[emb$w_hd_entry] EQLU EMB$K_VD))
: 1295      1859 3      Then
: 1296      1860 3          !
: 1297      1861 3          ! Determine if the device recorded by this volume
: 1298      1862 3          ! mount or dismount is a 'tape' type device.
: 1299      1863 3          Begin
: 1300      1864 4          If NOT TRANSLATE_CLASS (emb[emb$t_vm_namtxt],DC$_TAPE)
: 1301      1865 4          Then
: 1302      1866 4              !
: 1303      1867 4              !
: 1304      1868 4              ! Indicate that the device recorded by this entry is
: 1305      1869 4              ! not a 'tape', by returning to the calling routine
: 1306      1870 4              ! with a false value.
: 1307      1871 4              !
: 1308      1872 4              Return false
: 1309      1873 4          Else
: 1310      1874 4              Return true ;
: 1311      1875 3          End ;
: 1312      1876 3
: 1313      1877 5      If ( ((.emb[emb$w_hd_entry] EQLU EMB$K_LM) AND
: 1314      1878 4          (.emb[emb$b_m_class] EQLU DC$_TAPE)) OR
: 1315      1879 4          ((.emb[emb$w_hd_entry] EQLU EMB$K_SP) AND
: 1316      1880 5          (.emb[emb$b_sp_class] EQLU DC$_TAPE)) OR
: 1317      1881 4          ((.emb[emb$b_dv_class] EQLU DC$_TAPE) )
: 1318      1882 4          ! Entry type must be either a device error, timeout, or attention.
: 1319      1883 4          !
: 1320      1884 4          !
: 1321      1885 4          !
: 1322      1886 3      Then
: 1323      1887 3          !
: 1324      1888 3          ! Indicate that this entry does match a selected
: 1325      1889 3          ! device class, by returning to the calling routine
: 1326      1890 3          ! with a true value.
: 1327      1891 3          !
: 1328      1892 3          Return true ;
: 1329      1893 3
: 1330      1894 3          !
: 1331      1895 3          ! Determine whether this is tape related unsolicited mscp entry.
: 1332      1896 3          !
: 1333      1897 3          ! If .emb[emb$w_hd_entry] EQLU EMB$K_LOGMSCP AND
: 1334      1898 3          ! CH$EQL (2,emb[driver_type],2,CH$PTR(uplit('TAPE'))))
: 1335      1899 3          !
: 1336      1900 3          !
: 1337      1901 3          ! Yes, return to the calling routine with a true value.
: 1338      1902 3          !
: 1339      1903 3          Return true ;
: 1340      1904 2      End ;
: 1341      1905 2
: 1342      1906 2      ! Determine if 'MISC' entries are selected.
: 1343      1907 2
: 1344      1908 2      ! If ((.exclude_mask[exc$v_misc]) OR
: 1345      1909 2      ! (.include_mask[inc$v_misc]))
```

```
: 1346      1910  2 !Then
: 1347      1911  2
: 1348      1912  2 Determine if the device recorded by this entry, matches the
: 1349      1913  2 selected device class.
: 1350      1914  2
: 1351      1915  2 Begin
: 1352      1916  2 If .emb[emb$b_dv_class] EQLU DC$_MISC
: 1353      1917  2 Then
: 1354      1918  2
: 1355      1919  2 Indicate that this entry does match a selected
: 1356      1920  2 device class, by returning to the calling routine
: 1357      1921  2 with a true value.
: 1358      1922  2
: 1359      1923  2 Return true ;
: 1360      1924  2 End ;
: 1361      1925  2
: 1362      1926  2 Determine if 'LP' entries are selected.
: 1363      1927  2
: 1364      1928  2
: 1365      1929  2 If ((.exclude_mask[exc$v_line_printr]) OR
: 1366      1930  2 (.include_mask[inc$v_line_printr]))
: 1367      1931  2 Then
: 1368      1932  2
: 1369      1933  2 Determine if the device recorded by this entry, matches the
: 1370      1934  2 selected device class.
: 1371      1935  2
: 1372      1936  2 Begin
: 1373      1937  2 If .emb[emb$b_dv_class] EQLU DC$_LP
: 1374      1938  2 Then
: 1375      1939  2
: 1376      1940  2 Indicate that this entry does match a selected
: 1377      1941  2 device class, by returning to the calling routine
: 1378      1942  2 with a true value.
: 1379      1943  2
: 1380      1944  2 Return true ;
: 1381      1945  2 End ;
: 1382      1946  2
: 1383      1947  2 Determine if 'JOURNAL' entries are selected.
: 1384      1948  2
: 1385      1949  2
: 1386      1950  2 If ((.exclude_mask[exc$v_journal]) OR
: 1387      1951  2 (.include_mask[inc$v_journal]))
: 1388      1952  2 Then
: 1389      1953  2
: 1390      1954  2 Determine if the device recorded by this entry, matches the
: 1391      1955  2 selected device class.
: 1392      1956  2
: 1393      1957  2 Begin
: 1394      1958  2 If .emb[emb$b_dv_class] EQLU DC$_JOURNAL
: 1395      1959  2 Then
: 1396      1960  2
: 1397      1961  2 Indicate that this entry does match a selected
: 1398      1962  2 device class, by returning to the calling routine
: 1399      1963  2 with a true value.
: 1400      1964  2
: 1401      1965  2 Return true ;
: 1402      1966  2 End ;
```



```
: 1403 1967 2
: 1404 1968 2
: 1405 1969 2 | Indicate that this entry does not match any of the selected
: 1406 1970 2 | device classes, by returning to the calling routine with a
: 1407 1971 2 | false value.
: 1408 1972 2
: 1409 1973 2 Return false ;
: 1410 1974 1 End ; ! Routine
```

.PSECT \$PLIT,NOWRT,NOEXE, PIC,2

```
4B 53 49 44 00000 P.AAA: .ASCII \DISK\
45 50 41 54 00004 P.AAB: .ASCII \TAPE\
```

.PSECT \$CODE,NOWRT, PIC,2

003C 00000 VERIFY_DEVICE_CLASS:

```
55 00000000G 00 9E 00002 .WORD Save R2,R3,R4,R5 : 1682
54 00000000G 00 9E 00009 MOVAB EXCLUDE_MASK, R5
53 00000000G 00 9E 00010 MOVAB INCLUDE_MASK, R4
52 F4 A3 3C 00017 MOVZWL EMB+16, R3
0065 8F 52 B1 0001B CMPW EMB+4, R2 : 1712
11 12 00020 BNEQ R2, #101
50 64 D0 00022 MOVL INCLUDE_MASK, R0 : 1713
0A 60 02 E0 00025 BBS #2, (R0), 1$
50 64 D0 00029 MOVL INCLUDE_MASK, R0 : 1714
03 01 A0 E8 0002C BLBS 1(R0), T$
010A 31 00030 BRW 28$
51 65 D0 00033 1$: MOVL EXCLUDE_MASK, R1 : 1721
07 61 01 E0 00036 BBS #1, (R1), 2$
50 64 D0 0003A MOVL INCLUDE_MASK, R0 : 1722
21 60 01 E1 0003D BBC #1, (R0), 5$
0064 8F 52 B1 00041 2$: CMPW R2, #100 : 1729
06 12 00046 BNEQ 3$
80 8F 63 91 00048 CMPB EMB+16, #128 : 1730
77 13 0004C BEQL 13$
0063 8F 52 B1 0004E 3$: CMPW R2, #99 : 1732
06 12 00053 BNEQ 4$
80 8F 63 91 00055 CMPB EMB+16, #128 : 1733
7B 13 00059 BEQL 16$
80 8F A3 91 0005B 4$: CMPB EMB+28, #128 : 1735
74 13 00060 BEQL 16$
07 61 02 E0 00062 5$: BBS #2, (R1), 6$ : 1748
50 64 D0 00066 MOVL INCLUDE_MASK, R0 : 1749
45 60 02 E1 00069 BBC #2, (R0), 11$
0040 8F 52 B1 0006D 6$: CMPW R2, #64 : 1756
07 13 00072 BEQL 7$
0041 8F 52 B1 00074 CMPW R2, #65 : 1757
04 12 00079 BNEQ 8$
01 DD 0007B 7$: PUSHL #1 : 1764
78 11 0007D BRB 20$
50 F4 A3 3C 0007F 8$: MOVZWL EMB+4, R0 : 1776
```


	0064	8F		50	B1	00083		CMPW	R0, #100		
		01		05	12	00088		BNEQ	9\$		1777
				63	91	0008A		CMPB	EMB+16, #1		
	0063	8F		47	13	0008D		BEQL	16\$		1779
				50	B1	0008F	9\$:	CMPW	R0, #99		1780
		01		05	12	00094		BNEQ	10\$		
				63	91	00096		CMPB	EMB+16, #1		1784
		01	0C	79	13	00099		BEQL	22\$		
				A3	91	0009B	10\$:	CMPB	EMB+28, #1		1796
				7F	13	0009F		BEQL	24\$		
	0065	8F		50	B1	000A1		CMPW	R0, #101		1797
				0A	12	000A6		BNEQ	11\$		
00000000'	00		02	A3	B1	000A8		CMPW	EMB+18, P.AAA		1807
				74	13	000B0		BEQL	26\$		
	51			65	D0	000B2	11\$:	MOVL	EXCLUDE_MASK, R1		1808
07	61			06	E0	000B5		BBS	#6, (R1), 12\$		
	50			64	D0	000B9		MOVL	INCLUDE_MASK, R0		1815
07	60			06	E1	000BC		BBC	#6, (R0), 14\$		
	60	8F	0C	A3	91	000C0	12\$:	CMPB	EMB+28, #96		1828
				72	13	000C5	13\$:	BEQL	27\$		
				61	95	000C7	14\$:	TSTB	(R1)		1829
				07	19	000C9		BLSS	15\$		
	50			64	D0	000CB		MOVL	INCLUDE_MASK, R0		1836
				60	95	000CE		TSTB	(R0)		
				06	18	000D0		BGEQ	17\$		
	20		0C	A3	91	000D2	15\$:	CMPB	EMB+28, #32		1849
				61	13	000D6	16\$:	BEQL	27\$		
	07		01	A1	E8	000D8	17\$:	BLBS	1(R1), 18\$		1850
	50			64	D0	000DC		MOVL	INCLUDE_MASK, R0		
	5A		01	A0	E9	000DF		BLBC	1(R0), 28\$		1857
	50		F4	A3	3C	000E3	18\$:	MOVZWL	EMB+4, R0		
0040	8F			50	B1	000E7		CMPW	R0, #64		1858
				07	13	000EC		BEQL	19\$		
0041	8F			50	B1	000EE		CMPW	R0, #65		1865
				11	12	000F3		BNEQ	21\$		
				02	DD	000F5	19\$:	PUSHL	#2		
			0F	A3	9F	000F7	20\$:	PUSHAB	EMB+31		
00000000V	00			02	FB	000FA		CALLS	#2, TRANSLATE_CLASS		
	35			50	E8	00101		BLBS	R0, 27\$		1874
				37	11	00104		BRB	28\$		1877
	50		F4	A3	3C	00106	21\$:	MOVZWL	EMB+4, R0		
0064	8F			50	B1	0010A		CMPW	R0, #100		
				05	12	0010F		BNEQ	23\$		
	02			63	91	00111		CMPB	EMB+16, #2		1878
				23	13	00114	22\$:	BEQL	27\$		
0063	8F			50	B1	00116	23\$:	CMPW	R0, #99		1880
				05	12	0011B		BNEQ	25\$		
	02			63	91	0011D		CMPB	EMB+16, #2		1881
				17	13	00120	24\$:	BEQL	27\$		
	02		0C	A3	91	00122	25\$:	CMPB	EMB+28, #2		1885
				11	13	00126	26\$:	BEQL	27\$		
0065	8F			50	B1	00128		CMPW	R0, #101		1897
				0E	12	0012D		BNEQ	28\$		
00000000'	00		02	A3	B1	0012F		CMPW	EMB+18, P.AAB		1898
				04	12	00137		BNEQ	28\$		
	50			01	D0	00139	27\$:	MOVL	#1, R0		1902
				04	04	0013C		RET			

Entry Validation

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[ERF.SRC]RECSELECT.B32;1

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```
50 D4 0013D 28$: CLRL R0
    04 0013F RET
```

: 1974

```
; Routine Size: 320 bytes,    Routine Base: $CODE + 04E1
```

: 1411 1975 1

RR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99

```
1413 1976 1 Routine VERIFY_DEVICE =
1414 1977 2 Begin
1415 1978 2
1416 1979 2 ++
1417 1980 2
1418 1981 2 --
1419 1982 2
1420 1983 2 Local
1421 1984 2     Dev_name,
1422 1985 2     Dev_name_length,
1423 1986 2     Dev_unit,
1424 1987 2     Status ;
1425 1988 2
1426 1989 2 Bind
1427 1990 2     lm_name_length = emb[emb$t_lm_devnam] : BYTE,
1428 1991 2     sp_name_length = emb[emb$t_sp_devnam] : BYTE,
1429 1992 2     dv_name_length = emb[emb$t_dv_name] : BYTE ;
1430 1993 2
1431 1994 2
1432 1995 2     Determine whether this is an unsolicited mscp entry and
1433 1996 2     return with a false value if so (logmscp entries are not
1434 1997 2     applicable to a specific device).
1435 1998 2
1436 1999 2 If .emb[emb$w_hd_entry] EQLU EMB$K_LOGMSCP
1437 2000 2 Then
1438 2001 2     Return false ;
1439 2002 2
1440 2003 2
1441 2004 2     Determine the type of entry so that the comparison for the
1442 2005 2     device class is made against the appropriate field in the entry.
1443 2006 2
1444 2007 2     Determine if this a log message entry.
1445 2008 2
1446 2009 2 If .emb[emb$w_hd_entry] EQLU EMB$K_LM
1447 2010 2 Then
1448 2011 2
1449 2012 2     Entry type is a log message, get the device name,
1450 2013 2     name length, and unit number.
1451 2014 2
1452 2015 2     Begin
1453 2016 2     Dev_name = emb[emb$t_lm_devnam] + 1 ;
1454 2017 2     Dev_name_length = .lm_name_length ;
1455 2018 2     Dev_unit = .emb[emb$w_lm_unit] ;
1456 2019 2     End
1457 2020 2 Else
1458 2021 2
1459 2022 2     Determine if this is a log status entry.
1460 2023 2
1461 2024 2     Begin
1462 2025 2     If .emb[emb$w_hd_entry] EQLU EMB$K_SP
1463 2026 2     Then
1464 2027 2
1465 2028 2     Entry type is a log status, get the device name,
1466 2029 2     name length, and unit number.
1467 2030 2
1468 2031 2     Begin
1469 2032 2     Dev_name = emb[emb$t_sp_devnam] + 1 ;
```



```
: 1470      2033  4      Dev_name_length = .sp_name_length ;
: 1471      2034  4      Dev_unit = .emb[emb$w_sp_unit] ;
: 1472      2035  4      End
: 1473      2036  3      Else
: 1474      2037  3      |
: 1475      2038  3      | Determine if this a volume mount/dismount entry.
: 1476      2039  3      |
: 1477      2040  4      | Begin
: 1478      2041  5      | If ((.emb[emb$w_hd_entry] EQLU EMB$K_VM) OR
: 1479      2042  5      |   (.emb[emb$w_hd_entry] EQLU EMB$K_VD))
: 1480      2043  4      | Then
: 1481      2044  4      |
: 1482      2045  4      |   Entry type is a either a volume mount/dismount, get
: 1483      2046  4      |   the device name, name length, and unit number.
: 1484      2047  4      |
: 1485      2048  5      |   Begin
: 1486      2049  5      |   Dev_name = emb[emb$t_vm_namtxt] ;
: 1487      2050  5      |   Dev_name_length = .emb[emb$b_vm_namlng] ;
: 1488      2051  5      |   Dev_unit = .emb[emb$w_vm_unit] ;
: 1489      2052  5      |   End
: 1490      2053  4      |   Else
: 1491      2054  4      |   |
: 1492      2055  4      |   | Entry type must be either a device error, device timeout,
: 1493      2056  4      |   | or a device attention, get the device name, name length, and
: 1494      2057  4      |   | unit number.
: 1495      2058  4      |   |
: 1496      2059  5      |   | Begin
: 1497      2060  5      |   | Dev_name = emb[emb$t_dv_name] + 1 ;
: 1498      2061  5      |   | Dev_name_length = .dv_name_length ;
: 1499      2062  5      |   | Dev_unit = .emb[emb$w_dv_unit] ;
: 1500      2063  4      |   | End ;
: 1501      2064  3      |   End ;
: 1502      2065  2      End ;
: 1503      2066  2      |
: 1504      2067  2      |
: 1505      2068  2      | Call the search queue routine to determine if the device recorded by
: 1506      2069  2      | this entry matches any of the selected devices.
: 1507      2070  2      |
: 1508      2071  2      | Status = SEARCH_QUEUE (.dev_name,dev_name_length,dev_unit) ;
: 1509      2072  2      |
: 1510      2073  2      |
: 1511      2074  2      | Return the status from the search queue operation to the
: 1512      2075  2      | calling routine.
: 1513      2076  2      |
: 1514      2077  2      | Status
: 1515      2078  1      End ; ! Routine
```

```
0004 00000 VERIFY_DEVICE:
      52 00000000G 00 9E 00002      .WORD      Save R2
      5E          08 C2 00009      MOVAB      EMB+4, R2
      50          62 3C 0000C      SUBL2      #8, SP
0065 8F          50 B1 0000F      MOVZWL     EMB+4, R0
                        CMPW      R0, #101
```

```
: 1976
:
: 1999
:
```

RECSELECT
V04-000

Entry Validation

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			03	12	00014	BNEQ	1\$	
			50	D4	00016	CLRL	R0	2001
				04	00018	RET		
0064	8F		50	B1	00019	1\$: CMPW	R0, #100	2009
	51	11	0F	12	0001E	BNEQ	2\$	
	04	10	A2	9E	00020	MOVAB	EMB+21, DEV_NAME	2016
	6E	0E	A2	9A	00024	MOVZBL	LM_NAME_LENGTH, DEV_NAME_LENGTH	2017
			A2	3C	00029	MOVZWL	EMB+18, DEV_UNIT	2018
			3C	11	0002D	BRB	7\$	2009
0063	8F		50	B1	0002F	2\$: CMPW	R0, #99	2025
	51		0B	12	00034	BNEQ	3\$	
	04	3D	A2	9E	00036	MOVAB	EMB+65, DEV_NAME	2032
	6E	3C	A2	9A	0003A	MOVZBL	SP_NAME_LENGTH, DEV_NAME_LENGTH	2033
			26	11	0003F	BRB	6\$	2034
0040	8F		50	B1	00041	3\$: CMPW	R0, #64	2041
			07	13	00046	BEQL	4\$	
0041	8F		50	B1	00048	CMPW	R0, #65	2042
	51		0F	12	0004D	BNEQ	5\$	
	04	1B	A2	9E	0004F	4\$: MOVAB	EMB+31, DEV_NAME	2049
	6E	1A	A2	9A	00053	MOVZBL	EMB+30, DEV_NAME_LENGTH	2050
		18	A2	3C	00058	MOVZWL	EMB+28, DEV_UNIT	2051
			0D	11	0005C	BRB	7\$	2041
	51	3B	A2	9E	0005E	5\$: MOVAB	EMB+63, DEV_NAME	2060
04	AE	3A	A2	9A	00062	MOVZBL	DV_NAME_LENGTH, DEV_NAME_LENGTH	2061
	6E	26	A2	3C	00067	MOVZWL	EMB+42, DEV_UNIT	2062
			5E	DD	0006B	7\$: PUSHL	SP	2071
		08	AE	9F	0006D	PUSHAB	DEV_NAME_LENGTH	
			51	DD	00070	PUSHL	DEV_NAME	
00000000G	00		03	FB	00072	CALLS	#3, SEARCH_QUEUE	
			04	00079	RET			2078

; Routine Size: 122 bytes, Routine Base: \$CODE + 0621

; 1516 2079 1


```
: 1518 2080 1 GLOBAL ROUTINE TRANSLATE_CLASS (search_name,dev_class) =
: 1519 2081 2 Begin
: 1520 2082 2
: 1521 2083 2 ++
: 1522 2084 2
: 1523 2085 2 Functional Description:
: 1524 2086 2
: 1525 2087 2 This routine searches the device tables to verify the device
: 1526 2088 2 class and device name.
: 1527 2089 2
: 1528 2090 2 Calling Sequence:
: 1529 2091 2
: 1530 2092 2 TRANSLATE_CLASS (search_name,dev_class)
: 1531 2093 2
: 1532 2094 2 Input Parameters:
: 1533 2095 2
: 1534 2096 2 Search name = First two characters of device name
: 1535 2097 2
: 1536 2098 2 Dev_class = Device class to search for.
: 1537 2099 2
: 1538 2100 2
: 1539 2101 2 If the device class is found, then the specified device name
: 1540 2102 2 is compared against the device names in the device specific table.
: 1541 2103 2 Returns true if both match.
: 1542 2104 2
: 1543 2105 2 Returns false if device class and/or device name doesn't match.
: 1544 2106 2 (This should eventually be caught and handled by the parse_devname
: 1545 2107 2 routine.)
: 1546 2108 2
: 1547 2109 2 --
: 1548 2110 2
: 1549 2111 2 EXTERNAL
: 1550 2112 2 Dev_addrs_ptr: REF VECTOR [,long],
: 1551 2113 2 Dev_class_ptr: REF VECTOR [,word],
: 1552 2114 2 Max_classes: REF VECTOR [,byte];
: 1553 2115 2
: 1554 2116 2 OWN
: 1555 2117 2 I: BYTE Initial (1), ! Device address pointer index
: 1556 2118 2 Max_classes_value: BYTE ;
: 1557 2119 2
: 1558 2120 2 LOCAL
: 1559 2121 2 Dev_specific_tbl: REF VECTOR [,word], ! Device specific table address
: 1560 2122 2 K: Initial (0) ; ! Device specific table index
: 1561 2123 2
: 1562 2124 2 BIND
: 1563 2125 2 Cs_name = CH$PTR (uplit('CS')) ;
: 1564 2126 2
: 1565 2127 2
: 1566 2128 2 Device class ptr is the address of a table that contains supported device
: 1567 2129 2 classes and pointers to the device class specific information tables.
: 1568 2130 2
: 1569 2131 2 The device class specific table contains the supported device names,
: 1570 2132 2 image name pointers (image that needs to get activated), and transfer
: 1571 2133 2 address pointers.
: 1572 2134 2
: 1573 2135 2 This routine locates the matching device class retrieves the device
: 1574 2136 2 specific pointer and matches the specified device name against those
```

```
1575 2137 2 | in the device specific table.
1576 2138 2 |
1577 2139 2 | Loop through all of the device class entries.
1578 2140 2 |
1579 2141 2 | Max_classes_value = max_classes[0] ;
1580 2142 2 |
1581 2143 2 | Incr I from 1 to .max_classes_value do
1582 2144 2 |   Begin
1583 2145 2 |     If .dev_class_ptr[I] EQL .dev_class
1584 2146 2 |     Then
1585 2147 4 |       Begin
1586 2148 4 |         |
1587 2149 4 |         | Get the address of a device class specific table.
1588 2150 4 |         |
1589 2151 4 |         | Dev_specific_tbl = .dev_addrs_ptr[I] ;
1590 2152 4 |         |
1591 2153 4 |         |
1592 2154 4 |         | Initialize another index for the device class specific table so don't
1593 2155 4 |         | lose the current position. Determine if the contents of the device
1594 2156 4 |         | name field is valid OR whether the end of the device name entries
1595 2157 4 |         | in the table has been reached.
1596 2158 4 |         |
1597 2159 4 |         | K = 1 ;
1598 2160 4 |         | Until (.K EQL .dev_specific_tbl[0]) do
1599 2161 5 |         |   Begin
1600 2162 5 |         |     |
1601 2163 5 |         |     | Determine if the selected device name matches any of the
1602 2164 5 |         |     | device names recorded in this table.
1603 2165 5 |         |     |
1604 2166 5 |         |     | If CH$EQL (2, CH$PTR(.search_name), 2, CH$PTR(dev_specific_tbl[K]))
1605 2167 5 |         |     | Then
1606 2168 5 |         |     |   |
1607 2169 5 |         |     |   | The device names match. Using the class dir table index,
1608 2170 5 |         |     |   | get the corresponding device class.
1609 2171 5 |         |     |   |
1610 2172 5 |         |     |   | Return true ;
1611 2173 5 |         |     |   |
1612 2174 5 |         |     |   |
1613 2175 5 |         |     |   | Update the device name pointer indices.
1614 2176 5 |         |     |   |
1615 2177 5 |         |     |   | K = .K + 1 ;
1616 2178 4 |         |     | End ;
1617 2179 3 |         | End ;
1618 2180 2 |       End ;
1619 2181 2 |
1620 2182 2 |
1621 2183 2 | |
1622 2184 2 | | The name for the console device 'CSA' is not included in the device name
1623 2185 2 | | tables contained in ERFLIB.TLB. It really is a second device name for
1624 2186 2 | | the RX device which is included in the device tables. There should be
1625 2187 2 | | a table that includes devices like these, however because there is only
1626 2188 2 | | one at this time, it is checked for explicitly.
1627 2189 2 | |
1628 2190 2 | | If CH$EQL (2, CH$PTR(.search_name), 2, cs_name)
1629 2191 2 | | Then
1630 2192 2 | | |
1631 2193 2 | | | This is a 'CS' entry, determine whether the 'CS' device class
```



```
: 1632      2194 2      ! matches the device class being searched for.
: 1633      2195 2
: 1634      2196 2      Begin
: 1635      2197 2      If .dev_class EQL DC$_DISK
: 1636      2198 2      Then
: 1637      2199 2          ! Indicate that the device class matches by returning with
: 1638      2200 2          ! a true value.
: 1639      2201 2
: 1640      2202 2          Return true ;
: 1641      2203 2      End ;
: 1642      2204 2
: 1643      2205 2
: 1644      2206 2      !
: 1645      2207 2      ! Could not locate a class for this device name.
: 1646      2208 2
: 1647      2209 2      Return false ;
: 1648      2210 2
: 1649      2211 1 End ;          ! Routine
```

```
                                .PSECT $PLIT,NOWRT,NOEXE, PIC,2
                                00 00 53 43 00008 P.AAC: .ASCII \CS\<0><0> ;
```

```
                                .PSECT $OWNS$,NOEXE, PIC,2
                                01 00036 I: .BYTE 1 ;
                                00037 MAX_CLASSES_VALUE:
                                .BLRB 1
```

```
                                CS_NAME= P.AAC
                                .EXTRN DEV_ADDRS_PTR, DEV_CLASS_PTR
                                .EXTRN MAX_CLASSES
```

```
                                .PSECT $CODE,NOWRT, PIC,2
```

```
                                003C 00000 .ENTRY TRANSLATE CLASS, Save R2,R3,R4,R5 : 2080
55 00000000' 00 9E 00002 MOVAB MAX_CLASSES_VALUE, R5 : 2081
65 00000000G 52 D4 00009 CLRL K : 2141
54 65 9A 00012 MOVAB MAX_CLASSES, MAX_CLASSES_VALUE : 2143
50 D4 00015 MOVZBL MAX_CLASSES_VALUE, R4 : 2145
32 11 00017 CLRL I
BRB 3$
51 00000000G 00 D0 00019 1$: MOVL DEV_CLASS_PTR, R1
6140 3F 00020 PUSHAW (R1)[I]
08 AC 9E 10 00 ED 00023 CMPZV #0, #16, @ (SP)+, DEV_CLASS
20 12 00029 BNEQ 3$
51 00000000G 00 D0 0002B MOVL DEV_ADDRS_PTR, R1 : 2151
53 6140 D0 00032 MOVL (R1)[I], DEV_SPECIFIC_TBL
52 01 D0 00036 MOVL #1, K : 2159
10 00 ED 00039 2$: CMPZV #0, #16, (DEV_SPECIFIC_TBL), K : 2160
08 13 0003E BEQL 3$
6342 04 BC B1 00040 CMPW @SEARCH_NAME, (DEV_SPECIFIC_TBL)[K] : 2166
18 13 00045 BEQL 4$
52 D6 00047 INCL K : 2177
EE 11 00049 BRB 2$ : 2160
```

RECSELECT
V04-000

Entry Validation

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CA	00000000'	50	00	04	54	F3	0004B	3\$:	AOBLEQ	R4	I	1\$:	2143
					BC	B1	0004F		CMPW	@SEARCH_NAME,	CS_NAME	:	2190	
		01		08	0A	12	00057		BNEQ	5\$:		
					AC	D1	00059		CMPL	DEV_CLASS,	#1	:	2197	
		50			04	12	0005D		BNEQ	5\$:		
					01	D0	0005F	4\$:	MOVL	#1,	R0	:	2202	
						04	00062		RET			:		
					50	D4	00063	5\$:	CLRL	R0		:	2209	
						04	00065		RET			:	2211	

; Routine Size: 102 bytes, Routine Base: \$CODE + 069B

: 1650	2212	1
: 1651	2213	1
: 1652	2214	1 End
: 1653	2215	0 ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	56	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, PIC, ALIGN(2)
\$CODE	1793	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, PIC, ALIGN(2)
\$PLIT	12	NOVEC, NOWRT, RD, NOEXE, NOSHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	72	0	1000	00:01.9

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS\$:RECSELECT/OBJ=OBJ\$:RECSELECT MSRC\$:RECSELECT/UPDATE=(ENH\$:RECSELECT)

; Size: 1793 code + 68 data bytes
; Run Time: 00:40.9
; Elapsed Time: 01:21.8
; Lines/CPU Min: 3251
; Lexemes/CPU-Min: 19926
; Memory Used: 349 pages

Entry Validation

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```

: Compilation Complete

```

[illegible]

0153 AH-BT13A-SE
VAX/VMS V4.0

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